# 2016 Joint WOCMAT - IRCAM Forum Conference 2016 國際電腦音樂與音訊技術暨法國IRCAM工作坊聯合研討會 2016 12/14-12/16 開南大學 Kainan University

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# WOCMAT 2016 Agenda

Location

# December 14<sup>th</sup>, Wednesday

#### Conference Hall, Zhuo Ye Hall B103

Time	Program	Chair
08:40-9:30	Registration	Preparatory Office
9:30-10:00	Opening ceremony	President Jung-Hui Liang Dean Yao-Ming Yeh
10:00-10:20	Jeff HUANG, Paola PALUMBO and Emmanuel JOURDAN (IRCAM) General Presentation of Conferences WocMat-Forum IRCAM and presentation of Forum IRCAM	Dean Yao-Ming Yeh
10:20-11:10	【Invited Speech】 Ken PAOLI Macrostructural Aspects of Algorithmic Composition; Using Schenkerian Concepts to Shape Sections of a Composition and to Constrcut Larger Compositions	Prof. Wuan-Chin Li
11:10-11:20	Break	
11:20-12:10	【 Invited Speech 】 IRCAM - Emmanuel JOURDAN Ircam Real time technologies for Max	Prof. Chih-Fang Huang
12:10-13:40	Lunch buffet	
13:40-14:20	【 Keynote Speech 】 IRCAM - Thibaut CARPENTIER News Trends on IRCAM Development	Prof. Naotoshi Osaka
14:20-15:10	【 Invited Speech 】 IRCAM - Grégoire LORIEUX General presentation of IRCAM software	Prof. Wuan-Chin Li
15:10-16:00	【 Keynote Speech 】 Leigh LANDY Music and Technology in a Rapidly Changing Environment: Are We Ahead of the Game or Just Keeping Up?	Prof. Takeyoshi Mori
16:00-16:10	Break	
16:10-17:00	【 Invited Speech 】 IRCAM - Benoit MEUDIC Presentation of work with Thierry DE MEY	Prof. Yi-Cheng Lin
17:00-17:15	Conclusion of the day	
18:00-19:30		
19.30-21.30		

# WOCMAT 2016 Agenda

# December 14<sup>th</sup>, Wednesday

ClassRoom S401		Conference Hall, Zhuo Ye Hall B110 (Concert Session)		Location
Program	Chair	Program	Chair	Time
				08:40-9:30
				9:30-10:00
Sound Gallery/ Paper Poster	Prof. Ting-Yu Wang			10:00-10:20
				10:20-11:10
				11:10-11:20
				11:20-12:10
		Rehearsal		12:10-13:40
				13:40-14:20
	Prof. Ting-Yu Wang			14:20-15:10
Sound Gallery/ Paper Poster				15:10-16:00
				16:00-16:10
				16:10-17:00
				17:00-17:15
		Dinner(Lobby)	(Guests and invitees only)	18:00-19:30
		Concert 1 (Free admission)	Prof. Shing-Kwei Tzeng	19:30-21:30

# WOCMAT 2016 議程表

# 12月14號, 星期三

地點	國際會議廳, 卓越樓B103	
時間	議程	主持人
08:40-9:30	註冊、報到	籌備處
9:30-10:00	開幕式	開南大學梁榮輝校長 資訊學院葉耀明院長
10:00-10:20	Jeff HUANG, Paola PALUMBO and Emmanuel JOURDAN (IRCAM) General Presentation of Conferences WocMat-Forum IRCAM and presentation of Forum IRCAM	資訊學院葉耀明院長
10:20-11:10	【特邀講座】 Ken PAOLI Macrostructural Aspects of Algorithmic Composition; Using Schenkerian Concepts to Shape Sections of a Composition and to Constrcut Larger Compositions	李婉菁
11:10-11:20	茶敘	
11:20-12:10	【 特邀講座 】 IRCAM - Emmanuel JOURDAN Ircam Real time technologies for Max	開南大學 黃志方教授
12:10-13:40	午餐、茶敘	
13:40-14:20	【 專題講座 】 IRCAM - Thibaut CARPENTIER News Trends on IRCAM Development	日本東京電機大學 小坂 直敏教授
14:20-15:10	【 特邀講座 】 IRCAM - Grégoire LORIEUX General presentation of IRCAM software	李婉菁
15:10-16:00	【 專題講座 】 Leigh LANDY Music and Technology in a Rapidly Changing Environment: Are We Ahead of the Game or Just Keeping Up?	日本洗足園音樂大學 森 威功教授
16:00-16:10	茶敘	
16:10-17:00	【 特邀講座 】 IRCAM - Benoit MEUDIC Presentation of work with Thierry DE MEY	輔仁大學 林宜徵教授
17:00-17:15	Conclusion of the day	
18:00-19:30		
19:30-21:30		

# **WOCMAT 2016** 議程表

# 12月14號, 星期三

教室S401 國際曾議廳, 早越倭B110 (音樂會部分)	地點
議程 主持人 議程 主持人 主持人	時間
	08:40-9:30
	9:30-10:00
	10:00-10:20
<b>聲音藝廊/</b> 開南大學 Poster展示    王婷玉教授	10:20-11:10
	11:10-11:20
	11:20-12:10
彩排	12:10-13:40
	13:40-14:20
	14:20-15:10
聲音藝廊/ 開南大學   Poster展示 王婷玉教授	15:10-16:00
	16:00-16:10
	16:10-17:00
	17:00-17:15
<b>晚餐(大廳)</b> 僅提供貴賓及受邀同仁:	18:00-19:30
<b>音樂會1(免費入場)</b> 開南大學 <b>這</b>	19:30-21:30

# WOCMAT 2016 Agenda

# December 15<sup>th</sup>, Thursday

Location	Conference H Zhuo Ye Hall B	Conference Hall, Zhuo Ye Hall B103		oom )1
Time	Program	Chair	Program	Chair
9:30-10:00	【 Invited Speech 】 IRCAM - Grégoire LORIEUX Presentation of Orchids and Orchestration Tools	Prof. Chih-Fang Huang		
10:00-10:45	【 Invited Speech 】 IRCAM - Gilbert Nouno Audioguide and Antescofo as a General Sampler of Events	Prof. Ken Paoli	Sound	Prof Ting-
10:45-11:45	Paper Presentation I	Prof. Shing-Kwei Tzeng	Gallery/ Paper Poster	Yu Wang
11:45-12:00	Break			
12:00-12:30	<b>[ Music Presentation ]</b> <b>Yi-Cheng Lin</b> Journey into the World of Dimensions – for Electronic Music, iOS APP, and VR	Prof. Yu-Chung Tseng		
12:30-13:45	Lunch			
13:45-14:15	【 Music Presentation 】 Yu-Chung Tseng MusFit - An Integrated Wireless Wearable Interactive Music System	Prof. Ken Paoli		
14:15-15:30	<b>[ Invited Speech ]</b> IRCAM - Pavlos Antoniadis Gesture Cutting Through Textual Complexity: a Model and a Tool for the Embodied Navigation of Complex Piano Notation	Prof. Chih-Fang Huang	Sound Gallery/ Paper Poster	Prof. Ting- Yu Wang
15:30-16:00	<b>Clinton Watkins</b> Invisible Narratives	Prof. Takeyoshi Mori		
16:00-16:15	Break			
16:15-16:45	Jongwoo Yim CREAMA Artistic Activities and Cooperation	Prof. Naotoshi Osaka		
16:45-17:00	Conclusions of the day			
19:30-21:30				

# WOCMAT 2016 Agenda

# December 15<sup>th</sup>, Thursday

Conference Hall, Zhuo Ye Hall B110 (Concert Session)		IRCAMWORKSHOP (Classroom: A109)	Location
Program	Chair	Program	Time
			9:30-10:00
		IRCAM - Olivier PASQUET &	10:00-10:45
Rehea	arsal	Emmanuel JOURDAN Workshop on Max librairies	10:45-11:45
		*Participants should bring their own laptops.	11:45-12:00
			12:00-12:30
			12:30-13:45
			13:45-14:15
Rehea	arsal	IRCAM - Gregoire LORIEUX Workshop on Audiosculpt *Participants should bring their own laptops.	14:15-15:30
			15:30-16:00
			16:00-16:15
			16:15-16:45
			16:45-17:00
Concert 2 (Free admission)	Prof. Chien-Wen Cheng		19:30-21:30

# WOCMAT 2016 議程表

# 12月15號, 星期四

地點	國際會議廳, 卓越樓B103		教室S401	
時間	議程	主持人	議程	主持人
9:30-10:00	【特邀講座】 IRCAM - Grégoire LORIEUX Presentation of Orchids and Orchestration Tools	開南大學 黃志方教授		
10:00-10:45	【特邀講座】 IRCAM - Gilbert Nouno Audioguide and Antescofo as a General Sampler of Events	美國杜佩奇學院 Ken Paoli教授	磬咅蓺廊/	開南大學
10:45-11:45	【論文發表丨】	開南大學 曾興魁教授	Poster展示	王婷玉教授
11:45-12:00	茶敘			
12:00-12:30	【 Forum 音樂展示 】 Yi-Cheng Lin Journey into the World of Dimensions – for Electronic Music, iOS APP, and VR	國立交通大學 曾毓忠教授		
12:30-13:45	午餐、茶敘			
13:45-14:15	【 Forum 音樂展示 】 Yu-Chung Tseng MusFit - An Integrated Wireless Wearable Interactive Music System	美國杜佩奇學院 Ken Paoli教授		
14:15-15:30	【特邀講座】 Pavlos Antoniadis Gesture Cutting Through Textual Complexity: a Model and a Tool for the Embodied Navigation of Complex Piano Notation	開南大學 黃志方教授	聲音藝廊/ Poster展示	開南大學 王婷玉教授
15:30-16:00	<b>Clinton Watkins</b> Invisible Narratives	日本洗足園音樂大學 森 威功教授		
16:00-16:15	茶敘			
16:15-16:45	Jongwoo Yim CREAMA Artistic Activities and Cooperation	日本東京電機大學 小坂 直敏教授		
16:45-17:00	Conclusions of the day			
19:30-21:30				

# WOCMAT 2016 議程表

# 12月15號, 星期四

國際會議廳, 卓越樓B110 (音樂會部分)	IRCAM工作坊 (教室A109)	地點
議程 主持人	議程	時間
		9:30-10:00
		10:00-10:45
彩排	IRCAM - Olivier PASQUET & Emmanuel JOURDAN Workshop on Max librairies	10:45-11:45
	*參加者請自備筆電	11:45-12:00
		12:00-12:30
		12:30-13:45
		13:45-14:15
彩排	<b>IRCAM - Gregoire LORIEUX</b> Workshop on Audiosculpt *參加者請自備筆電	14:15-15:30
		15:30-16:00
		16:00-16:15
		16:15-16:45
		16:45-17:00
<b>音樂會2(免費入場)</b> 國立台北科技大學 鄭建文教授		19:30-21:30

# WOCMAT 2016 Agenda

# December 16<sup>th</sup>, Friday

地點	國際會議廳, 卓越樓B103		IRCAM工作坊 (教室A109)
時間	議程	主持人	議程
9:30-10:20	【 Invited Speech 】 IRCAM - Olivier PASQUET Presentation jTol rythm library and workshop Max Librairies	Prof. Chih-Fang Huang	
10:20-11:10	[ Paper Presentation II ]	Dr. Dong Zhou	
11:10-11:50	Break		IRCAM - Benoit MEUDIC Workshop on OpenMusic
11:50-12:30	【 Music Presentation 】 CHOW JUN YAN Exploring Co-performer Communication in Sound-Visual Improvisatory Performance	Prof. Shing-Kwei Tzeng	*Participants should bring their own laptops.
12:30-13:45	Lunch buffet		
13:45-14:45	[ Paper Presentation III ]	Dr. Li-Chuang Tang	IRCAM -Gilbert NOUNO
14:45-15:00	Break		Workshop on concatenative synthesis
ہ 15:00-16:00 8	Awards ceremony Awards ceremony of Sound Installation & Multimedia exhibition and 2016 Joint WOCMAT-IRCAM Forum Conferences (Free admission)		*Participants should bring their own laptops.
16:00-16:20	Conclusion of the Forum IRCAM-WOCMAT		

# WOCMAT 2016 議程表

# 12月16號, 星期五

Location	Conference Hall, Zhuo Ye Hall B10	3	IRCAMWORKSHOP (Classroom: A109)
Time	Program	Chair	Program
9:30-10:20	【 特邀講座 】 IRCAM - Olivier PASQUET Presentation jTol rythm library and workshop Max Librairies	開南大學 黃志方教授	
10:20-11:10	【論文發表Ⅱ】	周東	
11:10-11:50	茶敘		IRCAM - Benoit MEUDIC
11:50-12:30	【 Music Presentation 】 CHOW JUN YAN Exploring Co-performer Communication in Sound-Visual Improvisatory Performance	開南大學 曾興魁教授	Workshop on OpenMusic *參加者請自備筆電
12:30-13:45	午餐、茶敘		
13:45-14:45	【 論文發表 III 】	唐立權博士	
14:45-15:00	茶敘		IRCAM -Gilbert NOUNO
ہ 15:00-16:00 8	Awards ceremony Awards ceremony of Sound Installation & Multimedia exhibition and 2016 Joint WOCMAT-IRCAM Forum Conferences (Free admission)		Workshop on concatenative synthesis *參加者請自備筆電
16:00-16:20	Conclusion of the Forum IRCAM-WOCMAT		

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Leigh Landy, 英國De Montfort大學「音樂科技創意中心」主任 Leigh Landy, Director of Music, Technology and Innovation Research Centre, De Montfort University

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## Administration Chair / 大會秘書處召集人

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曾毓忠, 國立交通大學 Yu-Chung Tseng, National Chiao Tung University

Ken Paoli, 美國杜佩奇學院 Ken Paoli, College of Du Page, USA

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## Sound Gallery Program Executive Director / 聲音藝廊節目總策畫

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# 2016 Joint WOCMAT - IRCAM Forum Conference Paper and Music Reviewers

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Grégoire Lorieux, 法國IRCAM 龐畢度中心研究員 Grégoire Lorieux, IRCAM Researcher

Thibaut Carpentier, 法國IRCAM 龐畢度中心研究開發工程師 Thibaut Carpentier, R&D engineer

Pavlos Antoniadis, 法國IRCAM 龐畢度中心研究員 Pavlos Antoniadis, Researcher of IRCAM

# 2016 Joint WOCMAT - IRCAM Forum Conference

# Paper and Music Reviewers

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曾毓忠, 國立交通大學 Yu-Chung Tseng, National Chiao Tung University

鄭建文, 國立台北科技大學 Chien-Wen Cheng, National Taipei University of Technology

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Olivier Pasquet, 法國IRCAM 龐畢度中心研究員 Olivier Pasquet, Researcher of IRCAM

Emmanuel Jourdan, 法國IRCAM 龐畢度中心研究員 Emmanuel Jourdan, Researcher of IRCAM

Benoit Meudic, 法國IRCAM 龐畢度中心研究員 Benoit Meudic, Researcher of IRCAM

Grégoire Lorieux, 法國IRCAM 龐畢度中心研究員 Grégoire Lorieux, IRCAM Researcher

Thibaut Carpentier, 法國IRCAM 龐畢度中心研究開發工程師 Thibaut Carpentier, R&D engineer

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Jongwoo Yim, 韓國漢陽大學電子音樂研究中心 Jongwoo Yim, CREAMA of Hanyang University, Korea

# 2016 Joint WOCMAT - IRCAM Forum Conference

# Paper and Music Reviewers

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Ken Paoli, 美國杜佩奇學院 Ken Paoli, College of Du Page, USA

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李家翔, 國立交通大學 Chia-Hsiang Li, National Chiao Tung University

## Translation / 翻譯

周東, 德國漢堡音樂戲劇大學 Dong Zhoug, Hochschule für Musik und Theater, Germany

香港 Angie Cook Wong 博士 Dr. Angie Cook Wong, Hong Kong

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林宜徵, 輔仁大學 Yi-Cheng Lin, Catholic Fu Jen University

李婉菁, 輔仁大學 Wuan-Chin Li, Catholic Fu Jen University

# Organizer & Joint Organizer / 主&合辦單位

開南大學 資訊學院

School of Informatics, Kainan University

法國龐畢度音樂與聲學研究中心 IRCAM

# Co-Organizer / 協辦單位

法國在臺協會 Bureau français de Taipei

Institut Français

**外交部** Ministry of Foreign Affairs

科技部 Ministry of Science and Technology

桃園市政府教育局 Department of Education, Taoyuan

中華民國電腦音樂學會 Taiwan Computer Music Association

國立交通大學 工學院 聲音與音樂創意科技碩士學位學程 Graduate Degree Program of Sound and Music InnovativeTechnologies, College of Engineering, National Chiao Tung University

國立交通大學 音樂研究所 Institute of Music, National Chiao Tung University

國立臺北藝術大學 音樂學系 Department of Music, Taipei National University of the Arts

國立中央大學 資訊電機學院 資訊工程學系

Department of Computer Science and Information Engineer, College of Electrical Engineering and Computer Science, National Central University

厦门理工学院 数字创意学院 音乐科技与艺术学系 School of Digital Arts, Xiamen University of Technology

上海师范大学 音乐学院 音乐科技学系

School of Music, Shanghai Normal University

日本洗足學園音樂大學

Senzoku Gakuen College of Music

桃園新愛樂管絃樂團 Taoyuan New Philharmonic Orchestra, TNPO

# Co-Organizer / 協辦單位

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國立清華大學音樂、科技與健康中心 NTHU Center for Music, Technology and Heath

CREAMA

韓國漢陽大學 Hanyang University, Korea

# Avenue / 大會地點

## 演講/Lecture

國際會議廳, 卓越樓B103 Conference Hall, Zhuo Ye Hall B103

## 音樂會/Concerts

國際會議廳, 卓越樓B110 International Conference Hall, Zhuo Ye Hall B110

# 工作坊 / Workshop

A109教室, 至誠樓 Classroom A109, Zhi Cheng Hall

# 聲音藝廊、Paper展示 / Sound Gallery and Paper Poster

S401階梯教室, 綜合行政大樓四樓 Classroom S401, Administrative Building 4F

# Avenue / 大會地點



Music Concert International Conference Hall B110



Lecture International Conference Hall B110



歡迎各位嘉賓蒞臨第十二屆國際電腦音樂與音訊研討會(WOCMAT),自2005台大與電腦 音樂學會共同策劃主辦第一屆WOCMAT迄今,己成為台灣電腦音樂發展與國際交流最重 要的平台,歷年來發表了大量的論文、展演音樂會、聲音藝廊和聲音裝置藝術等函蓋跨領 域和多元的主題。

開南大學也主辦了三屆(2009, 2013,2016),今年很榮幸特別邀請到英國De Montfort大學 教授Leigh Landy和法國IRCAM主任Frank Madlener及IRCAM論壇專家Paola Palumbo 一行七人及美國Du Page學院教授Ken Paoli,本人僅代表開南大學及中華民國電腦音樂學 會預祝研討會順利成功,各位嘉賓在台灣有愉快的回憶!

開南大學資傳系榮譽講座教授 第十二屆電腦音樂與音訊研討會召集人

Distinguished guests, Ladies and Gentlemen! welcome to XII International Workshop of Computer Music and Audio Technology (WOCMAT), since 2005 National Taiwan University and Taiwan Computer Music Association co-organized the first WOCMAT, Which has become the most important platform for development of computer music and audio technology in Taiwan. We have published and performed a large number of papers, performances, sound gallery and sound installation in interdisciplinary. Kainan University also has hosted three times WOCMAT (2009, 2013,2016), this year we are very honor to invite Professor Leigh Landy, the De Montfort University, UK and Mr. Frank Madlener the director of IRCAM, France, Ms. Paola Palumbo with seven experts of IRCAM Forum and Professor Ken Paoli the College of Du Page, USA.

On behalf of faculty of Kainan University and Taiwan Computer Music Association I wish we will have a successful workshop and pleasant memories!

Honour Chair Professor Kainan University The Chair of Administration XII WOCMAT

Shing Kues Jary

# Welcome Messages / 歡迎辭

Chers invités, Mesdames et Messieurs!

Bienvenue au XII<sup>e</sup> Atelier International de Musique Informatique et Technologie Audio (WOCMAT). Depuis 2005 l'Université nationale de Taiwan et Taiwan Computer Music Association ont co-organisé la première WOCMAT, qui est devenu la plate-forme la plus importante pour le développement de l'informatique musicale et de la technologie audio à Taiwan. Nous avons publié un grand nombre d'articles de recherche), réalisé des performances, et présenté la galerie de son et des installations sonores interdisciplinaires. L'Université Kainan a également accueilli trois fois WOCMAT (2009, 2013, 2016). Cette année, nous sommes très honorés d'inviter le professeur Leigh Landy de l'Université De Montfort au Royaume Unis et Monsiuer Frank Madlener directeur de l'Ircam en France, Mademoiselle Paola Palumbo accompagnées de sept experts du Forum Ircam et le professeur Ken Paoli du Collège de Du Page aux États-Unis.

Au nom de la faculté de l'Université Kainan et de Taiwan Computer Music Association, je souhaite que les ateliers soient un succès qui nous laissera des souvenirs agréables!

Chaire d'honneur Professeur Kainan University Chaire de l'Administration XII WOCMAT

Shyknes Zang

### Keynote Speaker / 專題講者



# Prof. Leigh Landy

Director-Music,Technology and Innovation Research Centre, De Montfort University 英國 De Montfort大學 音樂科技與創意研究中心主任

Leigh Landy holds a Research Chair at De Montfort University (Leicester, UK) where he directs the Music, Technology and Innovation Research Centre. His scholarship is divided between creative and musicological work. His compositions include several for video, dance and theatre and have been performed around the globe. He has worked extensively with the late playwright, Heiner Müller, the new media artist, Michel Jaffrennou and the composer-performer, Jos Zwaanenburg and was composer in residence for the Dutch National Theatre during its first years of existence. Currently he is artistic director of Idée Fixe – Experimental Sound and Movement Theatre. His publications focus on the studies of electroacoustic music, including the notion of musical dramaturgy, contemporary music in a cross-arts context, access and the contemporary time-based arts, and devising practices in the performing arts. He is editor of "Organised Sound: an international journal of music technology" (CUP) and author of eight books including "What's the Matter with Today's Experimental Music?". "Understanding the Art of Sound Organization" (MIT Press) and "The Music of Sounds" (Routledge, 2012). More recently his ebook, "Compose Your Words" was published (Intelligent Arts, 2014) and the co-edited book (with Simon Emmerson), Expanding the Horizon of Electroacoustic Music Analysis (Cambridge University Press, 2016). He directs the ElectroAcoustic Resource Site (EARS) projects and is a founding director of the Electroacoustic Music Studies Network (EMS).

# Topic : Music and Technology in a Rapidly Changing Environment : Are we ahead of the game or just keeping up?

**Abstract:** As an experimental composer/musicologist who has been responsible for a modest number of technological developments, I feel it is my role to help create a musical future based on a strong foundation of the past. The fact is that a significant amount of experimental music involving technology seems to be exploring technological more than musical goals. Perhaps analogously some technology is being developed that is (not yet) relevant to music. Why can't they be merged somehow? For whom is this music/this technology being made?

Furthermore, there are interesting changes taking place in music making in this early phase of a new century, at least in terms of experimentation. This involves a move of focus from new musical languages, content and use of space to means of production (e.g., of sounds/samples, instruments and music) and dissemination, all of this coexisting with commercial culture of course. Given my interest in making experimental music accessible to a broad audience and inviting greater participation, this keynote will focus on a number of problem areas and, more importantly, some opportunities for artists, scholars and developers in order to help us get ahead of the game within this field.

## Keynote Speaker / 專題講者

# **Thibaut Carpentier**

IRCAM R&D engineer 法國龐畢度音樂與聲學研究中心 IRCAM 研究開發工程師



Thibaut Carpentier is an R&D engineer at IRCAM (Institut de Recherche et de Coordination Acoustique/Musique), Paris.

After studying acoustics at the Ecole Centrale and signal processing at the ENST Telecom Paris, he joined CNRS (French National Centre for Scientific Research) and the Acoustics &

Cognition Research Group in 2008.

His research is focused on spatial audio, room acoustics, artificial reverberation, virtual reality and compositional tools for spatial sound.

In recent years, he has been responsible for the development of Ircam Spat and he contributed to the conception and implementation of a 350-loudspeaker array for holophonic sound reproduction in Ircam's concert hall.

# **Topic: New Trends on IRCAM Development**



# Prof. Ken Paoli

Professor of Music, College of Du Page, USA

Ken Paoli is a musician comfortable in any musical situation...from commercial production and synthesizer programming to Broadway shows and Vegas' acts to jazz performance and experimental composition. Ken received his undergraduate training at DePaul University, studying composition with Phil Winsor. His graduate degrees are from Northwestern University, where he studied composition with Lyndon DeYoung and M. William Karlins.

He has worked with Frankie Valli and the Four Seasons, Bobby Vinton, Red Skelton, Vickie Carr, Marilyn Michaels, and Broadway shows including Joseph and the Technicolor Dream Coat, Music of the Night, 42nd Street, Peter Pan, Annie Get Your Gun, Beauty and the Beast, Mama Mia, Cabaret and Godspell. His arranging skills and synthesizer performance and programming ability have been displayed on many radio and television commercials for corporate advertising including McDonalds, Kentucky Fried Chicken, Oster, Capri Sun, Velamints, Kirby, and Schlitz.

Working as a consultant in the areas of audio and computers, Ken has designed sound installations, recording studios, acoustic treatments and synthesizer/sampling performance rigs. As a music journalist he has contributed interviews with new music composers, articles on music technology, and theory and analysis, Ken has taught at DePaul University and Western Illinois University where he was the chairman of Music Theory and Composition. While at Western Illinois he founded the New Music Ensemble, the New Music Festival and studied digital synthesis at the MIT Media Lab under the direction Barry Vercoe. He is currently the Director of Technomusicology at College of DuPage in Glen Ellyn, IL. During his tenure at College of DuPage Ken has established a state of the art recording facility and computer teaching classroom.

His catalog of works includes music for orchestra, acoustic ensembles, electro-acoustic combinations and algorithmic computer-assisted compositions.

Ken resides in Wheaton, IL and maintains a busy schedule of teaching, performing and writing in the Chicago-land metropolitan area.

#### **Topic : Macrostructural Aspects of Algorithmic Composition**

**Abstract:** For many composers the entry point to algorithmic composition involves processes that generate material that is reviewed by the composer. This generative approach can yield satisfactory results but does not reflect the way composers generally go about composing. The idea of an overall plan that includes larger structures is also common approach for composers. Most composers work in a complementary fashion that accommodates macro and micro structures.

A possible solution for generating larger sections of contrasting musical material will be presented with a demonstration of the real-time capabilities of this process. While the parameters of tempo, pitch, note value, velocity and transposition are included in this demonstration; most any musical parameter could be submitted to this process. 26

# **Emmanuel Jourdan**

IRCAM Researcher 法國IRCAM中心研究員



Born in 1980, Emmanuel Jourdan began studying the clarinet at the age of 8, and later studied computer music at the National Music School of Montbéliard and at the Conservatory of Besançon. He received many awards and honors and scholarships in clarinet, chamber music, conducting, computer music, and computer-assisted composition. From 1998 to 2001 he taught clarinet and played with several orchestras in eastern France. Since 2001 he has been working at the IRCAM pedagogy department, teaching computer music to young students and music educators, and was involved with the development of "Music Lab", a project for the French National Ministry Education. Since 2003, he has been principally involved with teaching Max/MSP/Jitter to the students of IRCAM's year-long cursus, as well as conducting workshops and seminars on IRCAM software. In 2006, he worked on Kaija Saariaho's opera "Adriana Mater", premiered at the Opera Bastille in Paris. Since 2006, he has been working as a developer for Cycling '74, Inc. He is currently working on the Max for Live project, designing the user interface elements.

#### **Topic: IRCAM Real time technologies for Max**

**Abstract:** Max is born at Ircam in the eighties to help composer fulfill their ideas. Almost three decades later, Cycling '74 continues to develop the software that is used in every production at Ircam and around the world. This presentation will cover a brief history of the development of Max, and focus on the technologies that have been developed at Ircam to extend Max's capabilities.



# **Grégoire Lorieux**

IRCAM Researcher 法國IRCAM中心研究員

Grégoire Lorieux (born 1976) is a french composer and computer music designer, teacher at IRCAM.After studying musicology and early music, he focus on composition by teaching with several teachers including Philippe Leroux and Gerard Pesson at the Paris Conservatoire. His activity in IRCAM is shared between the transmission of computer music concepts for all audiences (documentation, workshops) and a reflection on mixed music : a cycle of mixed educational pieces "Etudes Electriques" is currently being written. It initiates the Centre Pompidou two seasons of talking concerts for ircam works, now at the Centre Pompidou-Metz. He's committed in several contemporary music ensembles, and worked as a computer musician with many artists. G. Lorieux composed for many soloists and ensembles in France, Germany and Spain, also writes stage music, and received many commissions and residencies. It creates fleur inverse (compositions and improvisations). G. Lorieux receives the prize for young composers of SACEM in 2009.

#### **Topic: General Presentation of Our Software and Cursus**

**Abstract:** Since its fundation by Pierre Boulez in 1977, IRCAM has developed a multiple activity around creation, research and transmission. A lot of products we propose for the public are the results and the mirror of this intensive activity in diverse fields of research, as the deposit of this knowledge. All this technologic, musical, intellectual experience is transmitted to younger musicians, composers and scientists through a series of pedagogical activities.

### **Topic: Presentation of Orchids and Orchestration Tools**

**Abstract:** New tools have been created in IRCAM, providing a new access to sound databases, through different approaches, making it possible to organize a topology of timbre, which is one of the main topics of musical reseach nowadays. CataRT is a corpus-based concatenate synthesis environment, that plays grains from a large corpus of segmented and descriptor-analyzed sounds according to proximity to a target position in the descriptor space. With Orchids, build unthinkable orchestral colors by choosing a sound to be reconstructed with samples, given a set of psychoacoustic criteria. Orchids is the first complete system for abstract and temporal computer-assisted orchestration and timbral mixture optimization. It provides a set of algorithms and features to reconstruct any time-evolving target sound with a combination of acoustic instruments.

# **Benoit Meudic**

IRCAM Researcher 法國IRCAM中心研究員



Born in 1975, Benoit Meudic is a computer music designer. He has been working at Ircam (Institute for music/acoustic research and coordination) since 1999. After completing diploma in computer engineering in 1999, he worked as a scientist from1999 to 2004. In 2004, he received his Phd degree in computer music. In parallel, he studied piano with Alain Neveu at the national music school of Evry- Courcouronne, and studied composition with Jean-Michel Bardez in the Paris/10th arrondissement Conservatory. Since 2004, he has designed the electronics of pieces by Alexandros Markeas, Yan Maresz, Georgia Spiropoulos, Unsuk Chin, Luca Francesconi, Jérôme Combier, Michaël Levinas, Bruno Mantovani, Alireza Farhang and Thierry De Mey and has performed them in several countries (Germany, Sweden, Italy, Latvia, Lithuania, Corea, Japan). He is particularly interested in experimenting psychoacoustics through the composition of electronic music, and has explored this area by creating the duo Hierophantes in 2009 with the visual composer Yves-Marie L'hour. Complementary to his musical work he also studied psychotherapy/hypnosis, and proposes individual consultations in Paris. .

#### **Topic: Presentation of Work with Thierry de Mey**

**Abstract:** From "Taxinomy" to "Simplexity": three years of a creation process with composer Thierry De Mey.

In May 2016 was created the last musical piece and first choregraphy of Thierry De Mey "Simplexity". This piece is the concretization of 3 years of research and exploration of different ways to put in a concrete language the imagination of the composer, thanks to Ircam's softwares.

This presentation will focus on three aspects of the piece: first we will present the algorithms and generative processes that were written in Open-Music for generating sounds, musical scores and gestures. In particular, a theoretical model of the multiphonics of a perfect string was implemented, and a generative compositional algorithm was developed with the possibility of building hundreds of musical scores from a given database of specific chords and rhythms. Then we will focus on different gestures as pendulum oscillations, snake displacements or gibbons playing that were inspiration sources for building physical models in max/msp. Last, we will present an interactive video gesture sound generation system that was used during the concert. A live demonstration of this system will be proposed.



# **Gilbert Nouno**

IRCAM Researcher 法國IRCAM中心研究員

Composer, sound artist, performer and researcher at IRCAM. Gilbert Nouno lives and works in Paris. He received the Rome Prize Fellowship from the Académie de France à Rome Villa Médicis in 2011 and the Kyoto Villa Kujoyama Fellowship in 2007. His music draws inspiration from visual and digital art and design, spanning notated and improvised forms.

As an interdisciplinary artist under the name Til Berg, he explores the synaesthesic and emergent relationships between peculiar art fields. His concepts of work and production take advantage of generative language, data mining processes and algorithms. He draws abstract minimalist shapes and motions from music and sounds with traditional and digital medium like lithography and video. His work was shown in Paris at the research center for creation IRCAM, in Rome and in Florence at the foundation for contemporary arts Fabbrica Europa 2012.

Gilbert Nouno is professor of music composition at the Royal College of Music in London, and DAAD invited professor for sonic arts in Detmold-Germany for 2016-17. He teaches live electronics and computer musics design at IRCAM and at Goldsmiths University in London where he is currently Visiting Research Fellow and was invited as a sound and composition lecturer at the 2014 International Summer Course for New Music in Darmstadt.

He has performed with artists from different styles and fields of expression such as Pierre Boulez and the Berliner Philharmoniker, Michael Barenboim at the Proms in the Royal Albert Hall in London, George Benjamin and the London Sinfonietta at the Southbank Centre, Jonathan Harvey and the Arditti String Quartet, jazz saxophonist Steve Coleman, flutist Malik Mezzadri, underground turntablist DJ Oil and choreographer Susan Buirge.

#### Topic : Presentation of work with Ben Hackbarth on audio synthesis

**Abstract:** Gilbert Nouno will present a research work on concatenative synthesis originally developed by composer Ben Hackbarth in collaboration with Ircam in the musical research residency program. It analyzes databases of sound segments and arranges them to follow a target sound according to audio descriptors. The presentation of Audioguide will be followed by a workshop where the participants would experiment working with the software based on the python language and Ircam audio descriptors by the Sound Analysis and Synthesis research Team. Gilbert Nouno will also present a general approach of a composing workflow for electronic events in the Antescofo environment developed at Ircam during the last years. The Antescofo proper language has now become a unique tool for real time event management, and enable new ways to think electronic music scores. Recent music works and compositions using this new approach will be discussed, followed by a workshop for composers and sound artists.

# **Olivier Pasquet**

IRCAM Researcher 法國IRCAM中心研究員



Olivier Pasquet is a composer, music producer and visual artist. His work is based on the writing of audio visual compositions and synesthesia. His generative pieces, both minimalistic and maximalistic, are contextualized within a rationalist theory-fiction universe. This world can be explored both by singular pieces and an overall artistic path. The formal and plastic value gives it strong links with architecture, geometry and algorithmic design. His compositions are then sound-based, visual and material. Olivier Pasquet first practices music writing on his own. After composition studies at APU in Cambridge with Richard Hoadley, lectures with Trevor Wishart and Jannis Xenakis, he works in several popular music studios and does a short visit at INA-GRM. He then orientates his work toward staged, contemporary music and media art. Mostly at Ircam for 15 years, he collaborates with a wide variety of other artists. He confronts his sound works with reality thru performance art; dance, opera, music and contemporary theatre. His pieces also materialize themselves under the form of plastic installations and purely electronic music pieces. They are played, sometimes danced, in concert halls, galleries or clubs. For instance, Olivier Pasquet teaches interactive arts and computational design at l'Ecole Nationale des Arts Décoratifs from 2006 and 2009, theater-music at Théâtre National de Strasbourg between 2007 and 2008 etc. He received several prices and residencies such as Villa Médicis hors-les-murs, two residencies at Tokyo Wonder Site, Arcadi, residencies both in Chili and Taiwan. Between 2009 and 2012, he is invited researcher at Tokyo University with Philippe Codognet, Keio and Buffalo with David Felder. He also works at Sony CSL and is consultant at Ableton. Since 2013, he is doing a special research in musical composition and non-standard architecture at the Huddersfield University with Pierre Alexandre Tremblay.

#### **Topic: Presentation jTol Rythm Library**

**Abstract:** Jtol is a library dedicated to real-time pattern generation and can be applied to architectural design, music, dance; everything requiring constructed evolution in space and time. It deals with multi-scaling and multi-dimensions where rhythm is considered to be a skeleton onto everything else is attached (pitches, params...). Jtol was first programmed in python in max with the help of Bertrand Nouvel. It gathered data structures similar to the jitter library but with a nested architecture. It is now using the bach library in Max and is inspired by libraries like athenaCL, abjad, pyevolve, pwgl and open music. A series of Max for Live devices is on its way.



# Pavlos Antoniadis

Pianist for contemporary and experimental music Doctoral researcher at Ircam and LabEx GREAM

Pavlos Antoniadis is a Berlin-based pianist specializing in complex contemporary andexperimental music, as well as a doctoral researcher at IRCAM and LabEx GREAM, Université deStrasbourg. He has performed in Europe, the Americas and Asia with the new music ensemblesWork in Progress-Berlin, KNM Berlin, Phorminx, as well as a soloist. He has recorded for Mode(2015 Deutscheschallplattenkritikspreis for Best New Music release) and Wergo records. Hisresearch record includes publications on an embodied navigation model for complex notation, invited lecture-performances at several universities and research institutions (HfM Dresden, INMMDarmstadt, Ircam Paris, Orcim Gent, Goldsmiths London, Trinity Dublin, Aristoteleio Thessaloniki, Hong Kong University, Yamanushi Gakuin University, Harvard Medical School) and thedevelopment of a prototype for gestural processing of complex piano notation at IRCAM, as aMusical Research Residency fellow in 2014. Pavlos holds degrees in piano performance (MA, UCSan Diego) and musicology (Athens National University). He studied on Fulbright, UC San Diego, Nakas conservatory, Impuls Academy Gratz, IEMA Frankfurt and GREAM scholarships.

## Topic : Gesture Cutting Through Textual Complexity: a Model and a **Tool for the Embodied Navigation of Complex Piano Notation**

Abstract: The proposed paper and demo introduces a model of embodied interaction with complex pianonotation and a prototype interactive system for the gestural processing and control of musicalscores. In the first part, we present the postcartesian foundations of amodel of embodied interaction withsymbolic notation as complex as Iannis Xenakis's and Brian Ferneyhough's. The performance of such complex notation is conceptualized as embodied navigation in a non-linear space of notational affordances. The affordances are representable as annotations of the score, whichtakes the form of a multi-layered tablature (fig.1). The performer moves through and between thetablature's layers manipulates and notationas if it had tangible properties; as if it formed part of the musical instrument. As opposed to the timeline of a singular performance, the concept of thescore as non-linear space allows for the representation of diachronic learning processes and interpretational variations in series of performances. The act of navigating this space is claimed toform indispensable part of the cognitive processes involved in learning and performing: Itdynamically transforms the notation as external information-bearing structure and it constitutes anexample of mediation between symbolic signification, action-oriented descriptors and physicalenergy. In this sense, gesture acts as an interface for notation processing and notation forms partof the dynamic system "body-instrument-notation", rather than the composer's "brain in a vat". 32

Concepts from Gibson's ecological psychology, Rowlands's externalism, Lakoff's metaphor theory, dynamic systems theory and, last but not least, Leman's embodied mediation theory, are mappedupon Xenakis's and Ferneyhough's ideologies notation on and performance, offering anembodied and extended supplement, or even alternative, to traditional interpretation models. The second part proposes a technological application of the above-mentioned model. It introduces a prototype interactive system for the real-time processing and control of complexpiano notation through the pianist's gesture. This system, by the nameGesTCom, draws fromlatest developments in the fields of computer music representation (augmented and interactivemusical scores via Fober'sINScore) and gesture modeling (motionfollower by Bevilacqua / ISMMTeam IRCAM). Gestural, video, audio and MIDI data are captured, qualitatively correlated to themusical score (fig. 2) and appropriately mapped back into it, turning it into a personalized, dynamic, multimodal tablature (fig. 3). This tablature may be used for performance analysis anddocumentation, learning through augmented feedback, and can contribute to the design of interactive multimodal systems. Concluding: We wish to present a performer's perspective on the osmosis between contemporaryperformance practice, embodied cognition and computer music interaction, bv wav of atheoretical of embodied complex model navigation of notation and an interactive systemdedicated to it. This presentation affirms the centrality of gesture as an interface between physicalenergy and symbolic representations and hopes to contribute in the discussion concerning theontological status of gesture and notation in a digitally mediated world.



# **Clinton Watkins**

BVA DipAE MFA DocFA BCT Programme Leader Colab Faculty of Design & Creative Technologies

Clinton Watkins investigates affect through the construction of combined immersive experiences of sound, colour and scale. Work focuses on the characteristics, structures, phenomena, and processing of sonic and visual material. Installations incorporate found and custom-made audio and video hardware to create repetition, distortion, duration and form, distilled via a minimalist sensibility. He has exhibited in solo and group exhibitions throughout New Zealand, Australia, Europe, Asia and the United States. He is represented by Starkwhite Gallery, Auckland. Watkins is also a practicing experimental musician who regularly produces and performs as a solo artist and collaboratively, most recently working with artist Santiago Sierra and performing along-side free jazz saxophonist Peter Brötzmann. He holds a Doctoral Degree from Elam School of Fine Arts, lectures in experimental timebased media and is the Programme Leader of the Bachelor of Creative Technologies degree at AUT.

## **Topic : Invisible Narratives**

**Abstract:** The Invisible Narratives presentation is a 15-20 minute live sound performance that utilizes a specialized modular synthesizer system, midi interface and associated sequencing software. The focus of Invisible Narratives is upon creating narratives that are purely sonic and imageless, utilizing field recordings captured between 2012-2016 from various international locations within China, New Zealand, Australia, Europe and America. I will utilize the collected sound in application with my newly established composition techniques, customized electronic hardware and software for the production. The purpose of the performance is to evoke a visceral sense of isolation within another environment via new sound technologies

# Jongwoo Yim

**Director of CREAMA** 



Joogwoo Yim graduated the Seoul National University where he studied composition with Prof.Sukhi Kang in Korea. He studied sonology course at Institute of sonology, the Hague Royal Conservatory and studied composition with Klaas de Vries at Rotterdam Conservatory, where he received composition diploma in the Netherlands.

After he studied 'composition electroacostique, informatque et instrumentale' with Philippe Manoury, Maco Stroppa and Denis Lorrain at the department of SONVS, 'Conservaoire National Superieur de Musique de Lyon', where he received diploma DNESM in France. He fellowed ' Cursus annuel 2001-2002' for composition and computer music at Ircam in France.

His works have been performed several international festivals such as Gaudeamus, Resonance, Agora, SICMF, ISCM world music day, ACL New music festival, Alea III, Nova Musica, Faroese Art Festival, Havana Electronics Music Festival, Music & Electronics, Creama & Ircam concert etc.

Currently, he is a professor of composition and electro-acoustic music. Also he is director of CREAMA(Center for Research in Electro-Acoustic Music & Audio) at Hanyang University in Korea.

#### **Topic: CREAMA Artistic Activities and Cooperation**

**Abstract:** The Center for Research in Electro-Acoustic Music & Audio (CREAMA) was founded in September 2005, to promote pedagogy, research, creation, and performance in the domains of contemporary, electronic and computer music. CREAMA undertakes the organization of workshops, seminars symposia and concerts featuring a renowned array of international composers and performers of electro-acoustic and contemporary music. CREAMA also serves as a springboard for the centers and with industry. Additionally, the institute cultivates close relationships and exchanges with order to provide interdisciplinary exchanges between the arts.

The principal foals of the CREAMA are:

- Visibility of electro-acoustic music within the sphere of contemporary music
- Fostering education and understanding of contemporary and electro-acoustic music
- Spearheading technological research in the arts
- Promoting the use of new technologies and methods in the arts
- Collaboration and exchange with centers and with other disciplines in the arts

Through the Hanyang University New Media Music graduate program, we offer courses in the history and techniques of electro-acoustic music, as well as computer analysis, synthesis and real-time processing. Additionally, the New Media Recording graduate program provides students a thorough grounding in recording arts. Our annual Summer Workshops which have been organized since 2005, offer specialized one-week intensive study courses open to the general public which focus on different aspects of computer music, multimedia, interface design and specialized Tonmeister techniques. These workshops provide hands-on experience and are designed to provide an in-depth understanding of electro-acoustic music for amateurs and professionals alike. Throughout the academic year, CREAMA hosts seminars and master classes presented by distinguished invited guests who work in the fields of music technology, composition, performance, and audiovisual arts. Paper Sessions / 論文發表議程

# 12/15(Thursday) 10:45-11:45 Paper Session I

## 1. Chih-Fang Huang and Yajun Cai

Real time automated accompaniment system

### 2. Ken Paoli

Phil WInsor's Formosan Aboriginal Legends

#### 3. Naotoshi Osaka and Kazuho Hara

A rule-based automatic music arrangement

#### 4. Zhibo Xu and Dalei Fang

BODY MUSIC: AN ATTEMPT OF HYPER-MUSICAL REPRESENTATION THROUGH MULTIPLE SOUND PROCESSING APPROACHES

### 5. Shing-Kwei Tzeng

The Arts of Tai-chi 42 Postures with Hoomei as Interactive Performance

# 12/16(Friday) 10:20-11:10 Paper Session II

### 1. Stone Cheng, Shi-Shiang Niu and Cheng-Kai Hsu

STUDY OF SOUNDSCAPE EMOTIONS ALTERATION BY A BLEND OF MUSIC SIGNALS

### 2. Dong Zhou

Interactive Environmental Sound Installation for Music Therapy Purpose

#### 3. Ladislav Marsik

harmony-analyser.org - Java library and tools for chordal analysis

#### 4. Anna Terzaroli

The Dissonance Notation

#### 5. Byeongwon Ha

DILIGENT OPERATOR: THE RESURRECTION OF MUSIQUE CONCRÈTE WITH MAX/MSP JITTER AND ARDUINO
# 12/16(Friday) 13:45-14:45 Paper Session III

#### 1. Ho-Chun Herbert Chang and Spencer Topel

Sideband: An Acoustic Amplitude Modulation Synthesizer

#### 2. Li-Chuan Tang

A DESIGN FOR THE SPECTRAL-RESOLVED MUSIC-COLOUR DISPLAY SCHEME

#### 3. Natalie Yu-Hsien Wang, Fan-Pei Gloria Yang, Chen-Pei Lin, Tung-Mao Chiang and Yen-Ting Lai

ENHANCEMENT OF BRAIN NETWORKS AFTER MUSIC THERAPY

#### 4. 妍苑 高, Shen Lin, Chih-Fang Huang and Yancong Su

A PILOT STUDY ON THE INTERACTIVE MUSIC BIOROBOT INTEGRATION

#### 5. CHOW JUN YAN

Exploring Co-performer Communication in Sound-Visual Improvisatory Performance

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# 12/15(Thursday) 10:45-11:45 Paper Session I

# Chih-Fang Huang and Yajun Cai

# Real time automated accompaniment system

This research combines both the existing MIR (Music Information Retrieval) technology, and the fundamental music theory, to implement a real time automatic accompaniment system for the purpose of HCI (Human Computer Interaction) and edutainment. It uses the YIN pitch detection algorithm, and the Spiral Array key finding analysis. Although the time-domain pitch detection algorithm accuracy and the key finding analysis sensibility may cause the incorrect accompanied chord sometimes, it is a successful system substantially.

# Ken Paoli

# Phil WInsor's Formosan Aboriginal Legends

The Formosan Aboriginal Legends are early computer music videos of American composer Phil Winsor. They include three works: Sky Gods of Tavarong, Sacred 100 Pace Snake, and Ritual of Enemy Heads. Like many of Winsor's works, full realization involves an intermedia solution with video and audio components. Winsor's writings concerning these computer music videos reveal his technical and aesthetic approach. As an artist constantly involved with changes in technology, these works display a blending of techniques spanning over thirty years.

# Naotoshi Osaka and Kazuho Hara

# A rule-based automatic music arrangement

We propose an automatic music arrangement method that produces a variation on a piece of music to evoke an input emotion. It is implemented by specifying a note sequence from a given chord progression theme. It is hypothesized that a short music unit such as measure has one emotional element and the overall emotion of a piece of music is determined by concatenating and unifying these elements. A chord-based-variation in western art music fits well to this model, and one variation is mostly based on one modification rule. We chose a Beethoven's variation, and run a subjective test on impression among variations under the same theme using the SD method. The result of a principal component analysis (PCA) implies that the first and second axes of the principal component space correspond to the 2-dimensional AV space. Based on these results, we made a prototype which gives an impression at the designated position in AV space by applying the modification rule learned from the experiment stated above, given an arbitrary chord progression.

# Zhibo Xu and Dalei Fang

# BODY MUSIC: AN ATTEMPT OF HYPER-MUSICAL REPRESENTATION THROUGH MULTIPLE SOUND PROCESSING APPROACHES

Body Music for human body improvisation and liveelectronic, uses sensors and triggers to detect, extend, transform the performer's body motions to sound. The causality between performing actions and aural results is visually legible, nevertheless the actual sound processing methods are in multiple approaches. Unlike traditional music, the score of aural results cannot be commonly noted down whereas inaccurate motion series are planed beforehand. The performance of the piece is open-formed with current imaginations and emotions of both the dancer and the live-electronic manipulator. The computer runs a Max/MSP patch to process the controller data and sounds from both the motion sensors (Inertial Measurement Unit or IMU sensor and MIDITron) and sound sensors (contact microphones) fixed on the performer's hands and arms. The sounds were designed to motional distributions for surroundchannel system.

# Shing-Kwei Tzeng

# The Arts of Tai-chi 42 Postures with Hoomei as Interactive Performance

This research investigates the possibility of realization of a tool written in the Ruby programming language that, given a score, or a fragment of score, is able to detect the presence of dissonance understood as Sensory Dissonance, to quantify the dissonance and then to draw a plot of the traced dissonance. The instrument called d\_plot is constructed from the Sensory Dissonance model in Essentia 2.0 library. This paper is taken from the author's Master's Degree thesis in Electronic Music.

# 12/16(Friday) 10:20-11:10 Paper Session II

# Stone Cheng, Shi-Shiang Niu and Cheng-Kai Hsu STUDY OF SOUNDSCAPE EMOTIONS ALTERATION BY A BLEND OF MUSIC SIGNALS

This study presents an approach for analyzing the ingredient of emotions aroused by the music, and applied to the soundscape emotions analysis. Training process for emotion recognition system is preceded in a variety of features by 192 music clips to build emotional classification model for constructing two dimensional analysis of the emotive states. Eleven features are extracted into music and audio categories. The proposed system classified the category of four emotions by support vector machine (SVM), and draws the variation of emotion ingredients. A Gaussian mixture model (GMM) demarcates the boundaries of "Exuberance","Contentment", "Anxious", and "Depression" on the emotion plane. A graphic interface of emotion arousal locus on two-dimensional model of mood is established to represent the tracking of emotional transition. The soundscape survey procedure is carried out by studying the soundscape emotion locus tracking on selected soundscape to evaluate the effectiveness of emotions alteration by blended music signals.

# Dong Zhou

# Interactive Environmental Sound Installation for Music Therapy Purpose

This paper details one approach where music and media technology augment music therapy, and documents the interaction of composers, multimedia artists and music therapy scholars. By taking advantage of techniques in sound mapping, sound spatialization, algorithmic music and microtonal music, we created a "healing environment" within a hospital.

# Ladislav Marsik

# harmony-analyser.org - Java library and tools for chordal analysis

We present a new Java library and tools for analysis of music harmony focused on chroma vectors, chords and chord progressions. The underlying model is capable of creating, naming and analysing chords, as well as evaluating chord distances including Tonal Pitch Space, geometric distances on Tonnetz grid, or chord complexities. Special attention is given to the experimental distances between chroma vectors. Our system can take input in the form of text, MIDI input device, or the WAV file format. We provide tools for chordal analysis of the musical piece and for creating visual representations - chord segmentations, or line graph of chord or chroma distances. The system is extensible by creating additional plugins and provides an easy way of incorporating C++ based Vamp plugins, thus forming a suitable framework for music analysis in Java. Library and tools under harmony-analyser.org can be used for music analysis or as a feature extraction for music retrieval tasks.

# **CHOW JUN YAN**

# Exploring Co-performer Communication in Sound-Visual Improvisatory Performance

For the past few decades, researchers have conducted investigations to understand how musicians communicate and coordinate with each other as a performance unfurls. In general, verbal, non-verbal (eye contact, body language, and etc.), and musical cues have been employed by the musicians as a necessity of unifying the piece as a whole. In this proposal, I have extended the investigation from a single modality performance (music) to a multidisciplinary improvisation performance, where one musician and one visual artist have been invited to improvise together within their own disciplines. A composition with minimal structure acts as the common ground and has been provided to the performers as a general guidance for the performance. The performers use the materials from their own disciplines to coordinate, communicate and interact with each other when the performance unfurls. Furthermore, instead of conducting the investigation in a laboratory setting, the investigation has bee n conducted within a 'quasi-naturalistic' setting of rehearsals and performances.

In this presentation, the strategies for the preparation during the rehearsals will be presented, followed by a discussion of the communication strategies between a percussionist with live electronic music and a digital visual artist during their live interactions. The identification will help to provide a general understanding on how the performers from different modalities manage to develop a moment-by-moment acute sense of coordination and communicate with each other as the performance unfolds. In addition, the identification will also shed light on criteria useful for constructing a media platform which can support multiple modality improvisation.

# Byeongwon Ha DILIGENT OPERATOR: THE RESURRECTION OF MUSIQUE CONCRÈTE WITH MAX/MSP JITTER AND ARDUINO

Nam June Paik (1932-2006) exhibited a progressive music environment for audiences, Random Access (1963) in his first solo show. It allowed audiences to make their own sound collages by interacting with visual audiotapes on a white wall. The interactive approach of Random Access was mainly intertwined with his musique concrète composing experiences. This paper examines the relationship between Paik's work and musique concrète, and articulates Paik's contributions to making a prototype of musical interactive art. Based on the study, I suggest a creative musical space Diligent Operator (2016) with Max/MSP Jitter and Arduino.

# 12/16(Friday) 13:45-14:45 Paper Session III

# Ho-Chun Herbert Chang and Spencer Topel

# Sideband: An Acoustic Amplitude Modulation Synthesizer

This paper presents the Sideband Instrument, a modular synthesizer capable of producing acoustic amplitude modulation. The instrument consists of a tuning fork, a voice coil motor, bridge, and soundboard. Intermodulation is produced through periodic interruption of acoustic transduction using a linear actuator. Our system is compatible with electronic modular synthesizers, computers, and standard signal generators. We compare the performance of the Sideband Instrument with a prior prototype, demonstrating improved sideband harmonic generation, continuity and control in the time-frequency domain.

# Li-Chuan Tang

# A DESIGN FOR THE SPECTRAL-RESOLVED MUSIC-COLOUR DISPLAY SCHEME

A generalized visualization concept is proposed for a music-color display system in this study. Despite the existed display technologies, this spectral-resolved design can be applied to the electrical, mechanical, optical, and/or their hybridized display approaches. The classical Newtonian music-color mapping idea is reexamined. The spectral-resolved idea becomes reliable after putting time and frequency function decomposition. Some mechanical wave quantities are considered when the display design is proposed. In the mean wile, these related electrical conductive properties are taken into account.

# Natalie Yu-Hsien Wang, Fan-Pei Gloria Yang, Chen-Pei Lin, Tung-Mao Chiang and Yen-Ting Lai

# ENHANCEMENT OF BRAIN NETWORKS AFTER MUSIC THERAPY

Previous studies on melodic intonation therapy (MIT) have provided evidence on improvement of word production as well as connected speech. Yet, little attention is paid to establishing the relationship between treatment gains and neuroplasticity in language-related tracts. Understanding the underlying mechanism provides further insight into how the damaged networks are compensated.

Using tractography technique to visualize diffusion tensor imaging data (DTI), enhanced integrity of neural tracts was presented. The enhancement was found to be mostly right-lateralized and not only in commonly-reported arcuate fasiculus (AF) but also in other language-related tracts, including superior longitudinal fasciculus (SLF), uncinated fasciculus(UF), inferior longitudinal fasciculus (ILF), inferior fronto-occipital fasciculus (IFOF). Speech recovery associated with white matter (WM) change suggests neuroplasticity compensation in people with aphasia (PWA). An interactive model of language stream for speech recovery is proposed.

# Yan-Yuan Gao, Shen Lin, Chih-Fang Huang and Yancong Su

# A PILOT STUDY ON THE INTERACTIVE MUSIC BIOROBOT INTEGRATION

The application of robot technology has been used in many field. Intelligent robot technology is applied to education, social services and so on. The Pilot Study introduced that music biorobot under controlled by playing midi-keyboard for music education.

# Anna Terzaroli

# The Dissonance Notation

This paper presents the Sideband Instrument, a modular synthesizer capable of producing acoustic amplitude modulation. The instrument consists of a tuning fork, a voice coil motor, bridge, and soundboard. Intermodulation is produced through periodic interruption of acoustic transduction using a linear actuator. Our system is compatible with electronic modular synthesizers, computers, and standard signal generators. We compare the performance of the Sideband Instrument with a prior prototype, demonstrating improved sideband harmonic generation, continuity and control in the time-frequency domain.

\* via Video Conference

# IRCAM WORKSHOP Classroom A109 12/15(Thursday)

\*Participants should bring their own laptops.

Olivier Pasquet & Emmanuel Jourdan Workshop on Max librairies 10:00-12:30

Gregoire Lorieux Workshop on Audiosculpt 13:45-16:45

# IRCAM WORKSHOP Classroom A109 12/16(Friday)

\*Participants should bring their own laptops.

Benoit Meudic Workshop on OpenMusic 10:20-12:30

**Gilbert Nouno** 

Workshop on concatenative synthesis

13:45-16:00

# WOCMAT 2016 Concert 1, 7:30PM on December 14th

Place : Conference Hall, Zhuo Ye Hall B110

Composer	Title	Instruments	Time	
IRCAM Forum Works				
Yi-Cheng Lin(林宜徵)	Journey into the World of Dimensions	Electronic Music, iOS APP, and VR	10'00"	
- Wuan-chin Li(李婉菁)	Ban Shan	Computer music, fix media	4'00"	
Justin Yau	Last Breath of a Dying Man	Electronic Music	10'00"	
	Intermission			
Selected Works				
Hua Hsuan Tseng(曾華宣)	The Eagle Paths	Music Concrete	1′30″	
Sunhuimei Xia(夏孫惠美)	Walking Trio	Voice and electronic	1'30"	
Julius Bucsis	Stories From an Alien Pond	Fixed media	1'30"	
Shu-Cheng Wu(吳樹正)	Zauberhören	Fixed Media Electracoustic	1'30"	
Hsin-Jia Chang(張信加)	Harmonic Series of Cello	Electroacoustic music	1′30″	
Yuan-Yi Fan	S.A 3	Multimedia music	1′29″	
Yimin Wu(吳藝敏)	Turbulence in my stomach	Concrete Music	1'29"	
Yong-Bing Dai(戴永冰) Xiao-An Xu(許曉岸)	Fu Li 《伏枥》(伏櫪)	Electronic music	1'30"	
Lee Cheng(鄭重言)	Universe	Acousmatic music	1'29"	
Yu-Tung Cheng(鄭宇彤)	Paracusia	Electroacoustic music	1'22"	
Yan-yuan Gao(高妍苑)	Asking cicada(問禪)	Tri-chord	1'30"	
Chih-Liang Lin(林芝良)	Metamorphosis	Multimedia music	1'24"	
Yung-Hui Yang(楊詠惠)	Extension	Acousmatic music	1'29"	
Antonio D'Amato	L' immortelle	Acousmatic stereo (fixed media)	1′00″	
Massimo Fragalà	Voce231114	Acousmatic	1′00″	
Hsiouhui Kao(高琇慧)	No2236	Recording environment sound	1'30"	
Chia-I Lin(林佳儀)	Parhelion(幻日)	Electro-acoustic Music	1′30″	
Po-Hao Chi(紀柏豪)	Chromatic Nocturne	Electronic, Multimedia music	1′30″	
Yingzi Li(李英姿)	記憶·印象		1'29"	
Yun Hsuan Shen(沈芸萱)	In the dark	Acousmatic music	1'30"	
Patricia Martinez	Evaporation	Electroacoustic	0'51"	
Dennis Deovides Reyes III	The Fallen Forty Four	Fixed media	1'30"	
Hsin Yi Lu(盧昕逸)	Doors	Electronic music	1'29"	
Haoyu Yuan(袁昊昱)	Diary II-Ode to the motherland	Multimedia music	1'28"	
Katsuyuki Araki(荒木 勝幸)	A cluster of cold things		1′30″	
Dong Zhou(周東)	the Plaint	Soprano, voice, electronics	1'02"	
Yi-Cheng Lin(林宜徵)	Reincarnation	Japanese Shamisen trio and electronic music	1'30"	
Po-Yu Wang(王柏又)	Implosion	Electroacoustic	1'30"	
Takeyoshi Mori(森 威功)	Wan-Wan ( 碗々 )	Fixed media	1′30″	
Jack Shi(時昊)	Walking	Multimedia music	1'29"	
Xin Biao(標心)	Time in our life	Fixed media, two-channel stereo	1'30"	
Jou-Hsuan Wu(吳柔萱)	Silent Survivor	Electronic music	1'29"	
Chien-Wen Cheng(鄭建文)	)Raindrop Fantasy	Stereo tape music	1'29"	
Jie Man(滿潔)	Another Door	Fixed media	1'29"	
Qing Shao(邵青)	Three Etudes-tableaux No. I(詩畫三幀)	Multimedia music	1'30"	



# Yi-Cheng Lin(林宜徵)

Yi-Cheng Lin, a composer, programmer and iOS developer, received DMA degree in composition at University of Wisconsin-Madison at age of 26. She is an Assistant Professor at Fu-Jen University.

#### Journey into the World of Dimensions-for Electronic Music, iOS APP, and VR

Most of us believe that we are living in a three dimensional world. However, based on recent quantum physics research, we might live in a world with eleven dimensions, and we can only sense three of these dimensions since the other eight dimensions are hiding inside these three dimensions. Can you imagine a multi-dimensional world? What if we can sense all these other eight dimensions? Will other dimensions lead us into different worlds?

Though I am not a scientist, I very much enjoy entertaining the possibility that other dimensions are hiding in our world. As a composer and an iOS developer, I thought I could explore this notion of multi-dimension in the form of electronic music, and through my work, which uses a lot of panning to give audience a sense of space, together with headphone, VR device, and an iOS APP of telling the story, provide audience a "private and personal" experience of traveling through a series imaginary multi-dimensional world.

The work contains six movements. Movement one is about Earth; the middle movements explore different worlds or dimensions; and the final movement relates to Earth again, but in new ways that are reflective of the musical and dimensional journey this piece sets out to pilot.

The instrumental parts of this composition express the emotions associated with a multi-dimensional journey. The electronic parts represent the different kinds of scenery I imagine to be present in all of the new worlds. Though a world with more than three dimensions is intangible and beyond many people's imagination, I do not compose a hodgepodge of nonsense sounds or notes to represent that which defies logic. I compose based on sounds generated in the real world and organize those sounds in an illogical-logical way in order to represent the different worlds in each movement. I draw upon research suggesting that while dreaming, people are not limited by their neural system as much as when they are awake, and therefore can sense information from other dimensions, i.e. visualize their dreams. I intend to conceptualize the way the brain transfers (or translates) such information into recognizable images in audible ways.

The human brain, unfortunately, does not always accurately translate images and sounds; this is why, when we recall our dreams, the narrative, imagery, and the like are foggy. As such, the four middle movements of my piece will be distinct in their sounds in order to capture the diverse experience in this journey:

Mvt. II- A Metal World with Metal Air: Use the sound of metal to suggest a world contains metal rocks and air composed by metal materials.

Mvt III – A Dry and Windy World: Use sand and wind sounds to suggest a world that is dry, bold, and even a bit boring, without any living things.

Mvt. IV – A Violent World with Fire: Suggest a world that is hot and violent consumed by warfare and fires. Mvt. V – A World Composed with Spirits: Suggest a world that is not tangible, containing nothing but spirits or will-o'-the-wisp . The sound of "spirit air" starts from short value, and then gradually become longer, in order to convey a world in which time (or the measurement of time) is not stable. I want to express the idea that this world is beyond our space-time dimensions and completely imaginary. I want to create a world that scientists cannot prove exists or does not exist.

From Mvt. II to Mvt. V, the electronic music will progress from sounds that are hard and concise, and then gradually dissolve into sounds that are not tangible and more akin to the spirits. Since these sounds are recognizable in our reality but organized in a way that is not quite logical, I am taking a page from surrealism.

In order to present the idea that all of these worlds and dimensions are unified under a grand physical rule, musical elements such as dynamics, pitch intervals, rhythmic pattern, register, and articulations will be carefully interlocked and based upon total-serialism compositional methods.

Trying to project unknown multi-dimensional cosmos is not an easy thing to do, but I hope through this demo, I can lead audience to a scientific world beyond our imagination.

#### Wuan-chin Li(李婉菁)

Sandra Wuan-Chin Li, Composer Of the Siraya people, a former keyboardist of the well-know metal band "Chthonic". She is the composer for the TV documentary "Unknown Taiwan" produced by the Discovery Channel. Also, she was the artistic director of the musical "Dark Baroque." She started to work for theatre computer music workshops since 2013, encourage young musicians to work with deeper think-through creativities and collaborate with other international artists. Ms. Li earned the Master of Music degree in Computer Music from the Peabody Conservatory of the Johns Hopkins University in Baltimore, Maryland, USA. Where she studied computer music performance and composition with Prof. Geoffrey Wright. She had studied Pipe Organ and Harpsichord with Prof. Alexander Sung in the Music Department of Soo Chow University Taipei, and Piano and Electone with Prof. Mao-Song Lee. Her compositions "Ban Shan" (fixed media, 5.1 surround system) was featured at 2016 "klingt gut!" Symposium on Sound, Hamburg, Germany, and the International Society for Music Information Retrieval 2014 (ISMIR, Taiwan), selected at Sound and Music Computer Conference (SMC, Ireland); "Dirge" (for Prepared piano, Metal voice, and Real-time computer generated sound) was featured at the International Computer Music Conference 2015 (ICMC, USA), and "River, Rim and the Earth" (for Oboe and Computer generated sound ) was selected at ISMIR 2015 (Spain), featured at New York City Electroacoustic Music Festival and New York Philharmonic Biennial 2016. She is currently one of the curators of sound and music in Guling Street Avant-Garde Theatre, Taipei, also a faculty member of Fu-Jen Unversity and National Tsing Hua University.



#### Ban Shan (Computer Music for 5.1 Surround Sound System)

"Ban Shan 5.1" is a computer music work for 5.1 surround sound system, fix media. - Taiwanese for "play god" - is a story about a "Ba Jia Jiang," a young medium who also represents the bodyguards of Taiwanese god. He had a lucid dream after a temple fair until midnight. The young medium kept dancing in the dream until he finally became one of the gods. Taiwanese "Ba Jia Jiang (八家將)" originated from Chinese folk beliefs and myths, and are usually referred to as the eight members of the gods. The initial legend of Ba Jia Jiang is from the eight generals catching evil exorcists for the Wufu Emperor (五福大帝). The eight generals are the gods of the underworld. They are also known as the bodyguards or attendants for the temples of the nether gods such as Dongyue Emperor (東獄 大帝), Yama (King of hell, 閻羅王) and Cheng Huang (City gods, 城隍). In order to draw out the scene of the temple fair in Taiwan, in which "Ba Jia Jiang" mediums dance in martial troupes with firecrackers and Taiwanese gongs sounding, a version of 5.1-surround sound was designed for this work. Drum samples processed in multiple layers represent the different spaces/worlds that the young medium dreamed. The different spaces sometimes stretch over each other, sometimes stand up indivisible, and sometimes exist independently. Besides the sound samples of drums processed into varied transforms , a sampled Taiwanese Hand Gong was also played through multiple effects. In the traditional legend, people believe the sound of the Taiwanese Hand Gong leads the human spirit and ghosts. The composer, who grew up in the temple area in Tainan City (Taiwan), hopes the 5.1 surround sound version of Ban Shan will invoke the charming fever from the traditional festival in her hometown to share with the world. Ban Shan was featured at 2016 klingt gut! Symposium on Sound at The Hamburg University of Applied Sciences, Hamburg, Germany.



# Justin Yau

Justin Yau Shun Yee is currently studying Bachelor of Arts Music Composition concentration in Hong Kong Baptist University. He is learning music composition under both Christopher Coleman and Christopher Keyes. He has vast experience in recording and mixing with Protools. Justin composed electro acoustic pieces and numerous 20th century style works.

#### Last Breath of a Dying Man

The content of this electronic piece is about the last few moments of a man that's about to die. The sounds were intended to present the insanity and chaos running through the man's mind before his end. Throughout the entire piece is created through a 5.1 setting (surround sound) with an attempt to mimic voices within one's head.



# Hua Hsuan Tseng(曾華宣)

Originally from Hsinchu, Taiwan, composer Hua-Hsuan Tseng (1994 – ) received her BFA in music from Nation Taiwan University of Art in 2016. Hua-Hsuan retained cello as her major until this summer she shift my music into a new direction and began studying composition. Currently, Hua-Hsuan is working as a freelance composer.

#### The Eagle Paths

The Eagle Paths was inspired by a Chinese panting called "Falcon in Autumn" by Lin Liang. In the panting, the falcon shown here has flipped over in mid-flight to make a nosedive for its prey. The entire composition focuses on not only this concept but eagle flying movement which applies it to metallic, cyclic sound gestures.



#### Sunhuimei Xia(夏孫惠美)

Sunhuimei Xia, Composer. BA from Wuhan Conservatory, MM from Peabody. Her works have been performed at music festivals at Beijing, Shanghai, Nanning, Taipei, Baltimore, Athens. Currently teaching at Wuhan Conservatory.

# Walking Trio

This piece aims to expand the range, volume, and timbre of the voice, through manipulating prerecorded voice, and exploring the variety of possibilities on voice. There are three lines in the music.



## Julius Bucsis

Julius Bucsis is an award winning composer, guitarist, and music technologist. Since beginning serious efforts with composition in 2011, his works have been included in over 100 juried events worldwide.

#### Stories From an Alien Pond

"Stories from an Alien Pond depicts an imaginary interaction between life forms in and around a pond of liquid on another planet. The piece was inspired by the haiku poem, Old Pond by Matsui Basho and the structure of the piece is set according to the traditional haiku form. It was composed in 2015 and was selected for NYCEMF 2016 held in New York City, for Electronic Music Midwest 2016 held in Romeoville, Illinois, for Electroacoustic Barn Dance 2016 held in Fredericksburg, Virginia, and for the Diffrazioni Multimedia Festival 2016 held in Florence, Italy."



## Shu-Cheng Wu(吳樹正)

Shu-Cheng Allen Wu is a DMA candidate of music composition and Fulbright scholar in University of Illinois at Urbana Champaign. He is interested on sound synthesizing and information retrieval.

#### Zauberhören

This piece is inspired by magic performances which utility distractions, illusions, and other approaches to create a fantastic experience to audiences. Zauberhören is a short piece composed with audio illusions. Lots of audio contents in this piece are not exactly what it sounds like to you. How many of them can you find?



# Hsin-Jia Chang(張信加)

Hsin-Chia Chang was born in Shetou. She majors in electronic music at National Chiao Tung University now, studying with professor Yu-Chung Tseng.

#### Harmonic Series of Cello

The main idea of this composition is using the cello's sound to make a silent as well as mysterious atmosphere. Actually, it didn't use the real sound of playing the cello, it use the sound of cello's harmonic series So in this composition, everyone can hear different appearance of cello's harmonic series.



# Yuan-Yi Fan

Yuan-Yi Fan is a researcher, prototyping engineer, and new media artist at yuanyifan.com. He currently works at a startup in Hollywood, building an audio-centric A.I. ecosystem.

#### S.A. - 3

S.A. -3 is a multimedia music piece with video that visualizes sound using music information retrieval techniques. It examines emergent connections between sound and visuals through computation and algorithms.



# Yimin Wu(吳藝敏)

Yimin Wu has great enthusiastic towards contemporary music. He is both actively in performing and composing new music in all forms. His recent composition featuring Chinese and Western instruments had premiered in Hong Kong.

#### Turbulence in my stomach

When weather changes, the noises from my body



# Yong-Bing Dai(戴永冰)

Yong-Bing Dai majors in electronic music composition and teacher of Guangxi science and Normal College Member of the Electronic Music Association, China.



# Xiao-An Xu(許曉岸)

Xiao-An Xu majors in Ceramic art and teacher of Guangxi science and Normal College.

#### Fu Li 《伏枥》(伏櫪)

The "Fu Li" name from China Li three traditional allusions Mister Cao Cao's poem "out of Xiamen", which has a name called "LaoJiFuLi". This sentence emphasizes a good horse, even the elderly, will make every effort to run. Even the old moral hero, he will not forget the oath, will continue to move forward, it is life, struggle. I think through this analogy, to arouse people's pursuit of their initial dream, not to give up. The work itself is a kind of fine sculpture of the sound itself through various kinds of sound effect devices and the audio clips which are organized and created by the collage technique.



# Lee Cheng(鄭重言)

Lee CHENG is an interdisciplinary artist-teacher and researcher, currently working as a Post-doctoral Fellow at the Education University of Hong Kong. His research and artistic interest interdisciplinarize music, multi-media, technology, and education.

#### Universe

This acousmatic work explores the possibility of ambient surroundings of the universe. Gesture-based controllers were used in this composition to manipulate the parameters of a Pure Data synthesizer patch, a touch pad and a effect processor for this 90-second acousmatic music.



# Yu-Tung Cheng(鄭宇彤)

Yu- Tung Cheng, born in Taiwan, is currently pursuing Master's degree in Electronic Music Composition at NCTU, studying with Prof. Yu- Chung Tseng.

#### Paracusia

Paracusia, ( $\pi\alpha\rho\alpha\kappao\eta$ , a refusal to listen properly, or an attitude that chooses to disobey.) or an auditory hallucination, is a common symptoms of Schizophrenia. The hallucination involves perceiving sounds without auditory stimulus, and occurs at auditory system. True Hallucination patients can heard external sounds that however do not exist while nonpsychotic hallucination patients can specifically identify the sounds are derived from inside their body such as brain or abdomen. This piece is attempting to create or impersonate the sounds which exist in those people's acknowledgement yet actually happened to be absence in the real world.



# Yan-yuan Gao(高妍苑)

Graduate School of Shanghai Normal University. Graduted from Xiamen University of Technology.

# Asking cicada(問禪)

A cold cicada's song, looking for the sea. Trough the world, finally found myself. Used a part of Suzhou Ping-tan's audio and some percussion sound. The tri-chord represents the view on the way



# Chih-Liang Lin(林芝良)

Taiwanese composer Chih-Liang Lin creates music that involves acoustic instruments, multimedia works, and electroacoustic works. Her compositional interests include the expressive power of sound, and the aesthetic and application of noise.

#### Metamorphosis

This work has three main images with three characteristic sounds ot communicate an imagery which is a butterfly's life circle know as complete metamorphosis. Using the flashing lights throughout the whole work to present a dynamics of visual effect. The use of sounds always goes with the change of images to make the visual display more flowing.



# Yung-Hui Yang(楊詠惠)

Yung-Hui, Yang was born in 1993, She is a student at National Chiao Tung University, IMU in Taiwan, and majors in computer music. She has composed several chamber instrumental music and acousmatic music from past year. Currently, studying computer music composition under Dr. Yu-Chung Tseng.

#### Extension

The sound material have found extension in music. Each of these extensions can be motivated by the desire for certain sound to have solutions.



# Antonio D'Amato

He graduated in piano, harpsichord, music for multimedia, music pedagogy and electronic music. He also studied composition, bassoon, audio engineering and Ondes Martenot. He was trainee at Experimental Studio des SWR and ZKM.

#### L' immortelle

This work is built on short fragments from two pieces: the second section from The Lamentations of Jeremiah by Thomas Tallis and a french Courante for solo harpsichord published in 1680 by Perrine, French lutenist and composer. I was particularly fascinated by the peculiar style of the Courante, whose complete title is L'immortelle du Vieux Gaultier, Courante. Perrine-only the surname is known - published this piece in a book bearing the title of Pièces de luth en musique avec des regles pour le toucher sur le luth etsur le clavessin, containing 32 pieces, which are in fact transcriptions of previous compositions by Denis and Ennemond Gaultier - the latter also known as Gaultier le Vieux, two lutenists whose style reveals a great level of lyricism, an uneven conduct of parts, which followed dynamics and expressiveness rather than the rules of polyphony, abundant embellishments, arpeggios(style brisé) and in general, a gentle melancholy. Towards the middle of the 17th century the lute began a slow decline, giving the way to another instrument: the harpsichord. The cause of its decline could also be ascribed to the tablature notation that lutenists used: an iconic reproduction of the instrument's keyboard showing the position of fingers-a system of notation radically differing from the ordinary system and not comprehensible to non lutenists. When Perrine compiled his anthology of lute music transcribed for harpsichord, the lute style was already perceived as archaic and out-of-date, but previously the Gaultier name was synonymous of virtousism and excellent composition skills, so that Mary Burnell, a contemporary english lutenist, wrote-referring to E. Gaultier-"many musical lights have risen in France, amongst whom a single one - the sun among the stars-hath drawn the admiration and the praises of the world". Precious and decadent though it may be, the music by Gaultier le Vieux, introduces a fascinating and noble world to the attentive listener through exquisite miniatures. Clearly the intention of Perrine was to encourage the growing number of harpsichordists to learn and appreciate arepertoire which was going to disappear. My work is a little homage to the immortal heritage of two masters and their incomparable subtle style.



# Massimo Fragalà

He is an independent composer living and working in Italy. He graduated in Electronic Music and in Classical Guitar. His music has been performed in many festivals and conferences worldwide.

#### Voce231114

All the sounds that form this composition derive form the elaboration of word splash that myself recorded. Starting from this sample I tried to change the physical characteristics in order to generate a range of sounds more to less different compared to their original variety. This was possible using particular technique of sound processing such as waveset distorsion, brassage stretching, segmenting the sound and reassembling segments, reverberation, etc. This composition has been realized on linux kxstudio.



#### Hsiou-Hui Kao(高琇慧)

Participate in different works including stage designer, actress, performance art performer...Like to work with different forms and spaces that fuzz the line of daily life and art.

#### No2236

Industry machine monster shifting in the space. Disappeared.



# Chia-I Lin(林佳儀)

Chia-I Lin was born on August 24, 1992, in Keelung, Taiwan .She studies a master's degree at National Chiao Tung University, and majors in Computer Music instructed by Yu-Chung Tseng professor.

# Parhelion(幻日)

 $\[\]$  Parhelion  $\[\]$  is an atmospheric phenomenon that consists of a pair of bright in the sky appearing on either side of the sun, formed by refraction of sunlight through ice crystals high in the earth's atmosphere.



# Po-Hao Chi(紀柏豪)

Chi Po-Hao is a musician and sound artist from Taipei. He holds a Master of Music Degree from Goldsmiths College, UoL and Bachelors in Economics from National Taiwan University.

#### **Chromatic Nocturne**

"Chromatic Nocturne" is a generative music composition in "Lightscape" project, which focuses on the relationship between sensory experience and external structures within the city. The daily movings and behaviors in the public spaces shaped our memories of the city. Different streets and routes evoke the variety of urban life, which are the elements that constructed the collective memory. Noise is usually chaotic and disorderly, while organized noise (organisation du bruit) is a mirror, reflecting the reflection of society, and has the power to predict the future. How we interpret, organize, reproduce, and use sound are artifacts of ritualized processes. In turn, these aural structures interact with the city in light rich spaces, where people and activities concentrate and take form through sound. People instinctively avoid the dark, using the presence or absence of light to indirectly controlling and disciplining urban sound, thereby creating light's sensory mirror. The generative music system developed in Max/MSP transformed the flow of light points in the panoramic video into corresponding resonances, converged into abstract lines and noise. The moving image will be masked by the parameters retrieved from the field recording in synchronized with the data collecting process.



記憶・印象

# Ying-Zi Li(李英姿)

YING-ZI LI, born in Jiangxi province in China. In 2016, she was graduated from Tokyo University of the Arts, pursuing the master's degree in major Musical Creativity and the Environment.

# Life is to remember those years one have gone through, either happy or sad, sometimes sweet and sometimes bitter, yet they can become great spiritual wealth. Since I have long lived abroad my versatile memories and impressions of China have slowly grown blur and intermittent.! My work using and combining unique Chinese instruments such as Yangqin, Erhu(Banhu), Guzheng(Guqin) processed vocals etc. enabled me to achieve new sound image colors. They are sometimes clear, sometimes vague and abstract. Thus one can hear my identity in sound, memorable and impressive moments of my life.



# Yun-Hsuan Shen(沈芸萱)

Study in National Chiao Tung University. Major in Violin.

#### In the dark

Have you ever been in a dark place? Or even in a dark time? We maybe feel nervous and anxious while in the dark, just try to experience the feeling of it!



# Patricia Martinez

Patricia Martínez (Argentina) is a composer, performer and interdisciplinary artist. Her works has been awarded, commissioned by and performed at major international music festivals in Europe, USA and Ibero-America. She has a Doctoral and a Master degree from Stanford University.

#### **Evaporation**

An acoustic instrument became something else. An acoustic instrument merge into electroacoustic as a way to redemption, to evaporate into a new life. Questioning electroacoustic aesthetics, proposing an microscopic listening.



# **Dennis Deovides Reyes III**

Philippine composer Dennis Deovides Reyes III is a doctorate student from the University of Illinois at Urbana-Champaign, whose compositions find inspiration from Asian music to modern art, and Philippine tradition.

#### The Fallen Forty Four

The Fallen Forty Four is a fixed media piece for 8.1 channels. Composed in the Experimental Music Studios of the University of Illinois at Urbana Champaign in 2016, the piece portrays the bereavement and the desolation of the families of the 44 soldiers that died in the Mamasapano clash at the southern part of the Philippines. Sound synthesis, sound granulation, pitch processing, timbre and reverb manipulation are some of the main explorations employed in the construction of the piece. The spatialization of the piece in 8channels is one of the seminal features of the composition.



#### Hsin Yi Lu(盧昕逸)

24 years old, born in Kaohsiung, and I am a graduate students at Master Program of Sound and Music Innovative Technologies in National Chiao Tung University. I am interested in sound reinforcement engineering.

#### Doors

Door is an element to create a special relationship between different space. It separates a space in two when closing, but connects two spaces in one when opening. In my works, there are different sound section which made from same elements, and I use the sounds about door action to distinguish and link them in the same time, just do what a real door do.



# Hao-Yu Yuan(袁昊昱)

Dr. Yuan Haoyu, teacher at Center of Computer Music in China Conservatory, Member of The China Pop Music Standing Committee. He studies composition, electronic music with Mathias Spahlinger, Johannes Schöllhorn, Orm Finnendahl, Georg Hajdu in University of Music Freiburg, Cologne and amburg.

#### Diary II-Ode to the motherland

"This piece of music originates from a well-known patriotic song in Mainland China. The lyrics have many different versions in different time, every version can be sung with different style. The idea of taking the lyrics as basic element of creative graphicsis from Rubik's Cube."



# Katsuyuki Araki(荒木 勝幸)

"Katsuyuki Araki is a composer and an assistant at Senzoku Gakuen College of Music. He have created electroacoustic pieces, live-electronics pieces, and audio/visual pieces. He won the FUTURA prize in CCMC 2016."

#### A cluster of cold things

"This piece was used melting ice sound. Also, I combine ices and salt, so Igot many characteristic sounds and containing over harmonic tone sounds. I created originally this piece for multi-channel piece."



# Dong Zhou(周東)

Dong Zhou, composer and multimedia artist, graduated from Shanghai Conservatory and currently studies in Hamburg University of Music and Drama(HfMT).

#### the Plaint

It's a saddest, desperate moment before a final lament. Soperano: Pia Salome Bohnert Voice: Dong Zhou



# Yi-Cheng Lin(林宜徵)

Yi-Cheng Lin, a composer, programmer and iOS developer, received DMA degree in composition at University of Wisconsin-Madison at age of 26. She is an Assistant Professor at Fu-Jen University.

#### Reincarnation

An acoustic instrument became something else. An acoustic instrument merge into electroacoustic as a way to redemption, to evaporate into a new life. Questioning electroacoustic aesthetics, proposing an microscopic listening.



# Po-Yu Wang(王柏又)

Po-Yu Wang graduated from a master's course at the National Taipei University of Education. In 2016 he went on to study Electronic Computer Music at National Chiao Tung University, under Yu-Chung Tseng.

#### Implosion

This piece draws on Jean Baudrillard's theory of implosion, taking extended techniques on the upright piano as a focus. A computer was then used to make the sounds more abstract. Until the final structure, it is almost impossible to identify the provenance of the sounds. This demonstrates humanity's tendency to reproduce or simulate reality, which in the end produces a hyper-reality that is superimposed upon reality.



#### Takeyoshi Mori(森 威功)

He is a composer, programmer, and educator whose works have been performed internationally, and Assistant Professor at Music Design Course of the Senzoku Gakuen College of Music and an adjunct lecturer at Tokyo University of the Arts.

#### Wan-Wan(碗々)

Dropping various kinds of polygon objects into a turning bowl ( $\overline{m}$ ) made of metal – as you can imagine, a wide variety of sound sources are available with this method, each of which has some unique textures in terms of its rhythmic structure and timbral changes in time. I focused on the diversity of those sound materials, and various types of granular sampling and FFT/IFFT processing are utilized for this project. The title that has two adjacent letters of  $\overline{m}$  represents the encapsulating acoustic hemisphere ( $\overline{m}$ ) with sound diffusion systems as well as the sound source ( $\overline{m}$ ) for this piece



# Jack Shi(時昊)

Jack Shi, born in Shandong, was earning his Electronic Music Composition master degree in Central Conservatory of Music, Beijing, China.

#### Walking

The piece is Multimedia Music. The Video use ordinary Black and white, which was trying to convey a sense of energy and strength . The Audio has jointly developed in the sampling of the regular rhythm and the "abstract" electronic music after deformation technology.



# Xin Biao(標心)

Ms. Biao began to study piano since she was 4 years. She is currently in her second year in the music department of Fu-Jen Catholic university. She is major in piano, study with Mr. Michael Dellinger, minor in composition with Dr. Yin-Yin Lin, also learning applied music with Ms. Sandra Tavali.

## Time in our life

"Time" represented itself in our life in vary formats. Although we are unable to see it in eyes, we can feel it via many different materials or situation. In this work "Time in Our Life," I tried to describe the invisible "Time" through there mixed colorful sound I created. Using the general sound sample from clocks and oven timer, as the fundamental elements to fill the whole work, and toward the listeners feelings to future, but this sound, still decaying in the space. Our life is like the timer on oven. When it starts, the heat and brighten shine in light, but itis also been counted down to its end. All we can do is keep going, without any returning point. Because we have "Time," we are being defined by its every second, but we also are the owners of its every second.



# Jou-Hsuan Wu(吳柔萱)

Jou-Hsuan Wu, born in Taiwan, received her bachelor's degree in Viola Performance from University of Taipei, and later studying Sound and Music Innovative Technologies at NCTU with Prof. Yu-Chung Tseng.

#### Silent Survivor

Running in and out of time, Surrounding with positive things. Will I gain inner peace? The idea for this piece is telling inside of survivors that how struggling in their heart. Even they were very calm in appearance, you never know what they went through. We maybe think after all of the darkness and sadness, soon comes happiness. But that not for everyone, survivors were under a shadow from the past and fighting with for life. At the beginning of this piece, I used the sound of Bass to symbolize of peace and used some tiny elements to express how hard a struggle inside



# Chien-Wen Cheng(鄭建文)

Chien-Wen Cheng received D.M.A. in Music Composition at the University of North Texas. He works as assistant professor at the Department of Interaction Design at the National Taipei University of Technology in Taiwan.

#### **Raindrop Fantasy**

This piece is inspired by the sound of raindrops and is based on my impression of the raindrops falling on various surface. The music portrays the imagined soundscape of rain by transforming the sound samples from tam-tam, bells, and metal percussions through the techniques of granular synthesis, delays, and spectral editing.



# Jie Man(滿潔)

Man Jie, born in Inner Mongol, China. She got her second master's degree in Composition from Tokyo University of Arts. Her music is regularly performed mainly in China and Japan. Her work has been collected by Tokyo University of Arts Museum.

#### Another Door

When you listen to the piece, you might be able to hear, or visualize through the entangled layers between electronic and instrumental textures, through various colors between those musical sounds, ugly sounds, noise(transformed from cello, Japanese koto, Chinese guzheng, erhu, dizi, sanxian), and through several types of musical material from Western and Eastern cultures – emerging imagery like the grasslands of Inner Mongolia, untouched nature, forest, lakes, or "another door".



# Qing Shao(邵青)

She is now studying the PHD courses with Prof. Xu Shuya at Shanghai Conservatory of Music. Her musical works include instrumental, electroacoustic and sonic media arts.

#### Three Etudes-tableaux No. I(詩畫三幀)

The piece is based on the different piano playing techniques and different processing methods of electro-acoustic music. Mainly focusing on the combination of prepared piano sounds and their electro-acoustic transformations, which has similar rhythm and kinetic shapes as sea waves and dance movements from the accompanied video (shot by ZhaoGuanjie using UAV at some beach in Taiwan.

# WOCMAT 2016 Concert 2, 7:30PM on December 15th Place : Conference Hall, Zhuo Ye Hall B110

Composer	Title	Instruments	Time
IRCAM Forum Works			
Shing-Kwei Tzeng(曾興魁)	Tai chi 42 Postures with Hoomei as Interactive Performance	Interactive Performance	10'00"
Chao-Ming Tung(董昭民)	"Heart Sutra"	Guzheng and live electronics	10'00"
Chih-Fang Huang(黃志方)	"Pavilion Farewell"	Soprano and VirtualOrchestra	8'00"
Pei-Fen Huang(黃佩芬)	"In the name of love"	Flute and Electronic	8'00"
Yu-Chung Tseng(曾毓忠)	MusFit - An Integrated Wireless Wearable Interactive Music System	Interactive Performance	5'00"
	Intermission		
Selected Works			
Yu-xuan Hua(花瑜萱)	Storm in the forest	Acousmatic music	1'30"
Wuan-chin Li(李婉菁)	The Wind Bloweth Where It Listeth	Computer music, fixed media	1'26"
Anna Terzaroli	Overcome	Acousmatic music (tape)	1'30"
Lin Shen(申林)	Bell and Drum on the Mountain Forest(山林鐘鼓)		1'30"
Yu Li(李嶼)	A Cobweb over in the Meadow (草叢裏的蛛網)	Electronic music	1'30"
Ayako Sato(佐藤 亜矢子)	tiny fragments of his dream houses	Acousmatic music	1'30"
Ken Paoli	Cathedral	Multimedia music	4'10"
Xiaohu Du (杜嘯虎)	Changing	Chinese Percussion and Electronic Music	1'29"
Chen-an Tai(戴晨安)	A million shrimp	Electronic music	1'30"
Yi-Huei Chen(陳宜惠)	The Edge of Chaos	Multimedia music	1'30"
Benjamin O'Brien	The Loop	Fixed media	1'14"
En-en Chen(陳恩恩)	Keep Going	Acousmatci music	1'30"
Chia-Hsiang Lee(李家翔)	Chaos	Acousmatci music	1'20"
Chu-Huan Lo(羅珠環)	The Surging Billowy Era(風起雲湧)	Stereo tape music	1'28"
Leigh Landy	Xun	Xun and electroacoustic music	12'07"

# Shing-kwei Tzeng(曾興魁)

Tzeng, Shing-kwei studied and graduated at Musik Hochschule im Freiburg. Major in composition with Prof. Klaus Huber and Prof. Brian Ferneyhough; 1986 he also got scholarship of French Government, graduated with Diplom of Ecole Normal de Musique de Paris. Since 1981 he is a Professor at Music Department of National Taiwan Normal University, Taipei/Taiwan. 2005 he is retained by Department of Information Communications of Kai-Nan University. His compositions were performed by Gaudeamus Music Week, 1981/84 by ASKO Ensemble, World Music Days and Festival of ISCM Hong Kong 1988, Asia Pacific Festival Sentai/Japen1988 Seoul/Korea 1990, Presence Festival Paris/France 1996 by Ensemble 2E2M/ France, Quartet Alea III Boston /USA 1991, National Concert Hall by National Symphony Orchestra Taiwan 2007. 1999 he has established Society of Electronic and Acoustic Music, Taiwan and was selected as Ist Chairman.2002~2003 he was the Fulbright Scholar (2002~03) and visited CCRMA, Stanford University and University of North Texas. he is the laureate of Wu San-Iian Award Taiwan 2013.



#### Tai chi 42 Postures with Hoomei as Interactive Performance

The Arts of Tai-chi 42 Postures with Hoomei as Interactive Performance contains Tai-chi-quan, Hoomei (throat singing, kind of Chi-kung) and technology (sensors detecting, data transmission...). It is an integration of my life experience, technology learning, and composition concept existing in the most recent 13 years. As a Taiwanese, Tai-chi is quite well-known; as a traditional composer using high technology, Max/MSP is always an obstacle should be conquered by attending seminars, workshops, etc. "Tai-chi generates two complementary forces. Two complementary forces generate four aggregates. Four aggregates generate eight trigrams. Eight trigrams determine myriads of phenomena." Tai-chi is a chaos full of the Space. Tai-chi Interactive Performance combines with Hoomei, new technology which can reach the Sky and be unlimited by Sky.

In the recent 13 years I have practiced Tai-chi quan (also Hoomer singing whicjh I treat as kind of Chi-Kuong), I dream combining the beautiful movement to trigger, to generate music, through sensor's motion tracking, through interactive performance arts I have created! In my Performance I use 8 channels sensor, 4 bends, 3 buttons, 1 accelerator, 4 bends control the continues data changing, the rest sensors as a trigger. 4 bends attach on the crooks of the arm, knees, 3 button on the right shoe and the right thumb, the left thumb, 1 accelerator on the right fist.

#### All the piece is constructed by 7 scenes:

Scene 1 :Simple FM I - Bend1: carrier freq - Bend2: modulation index - Effekt Reverb (yafr) Scene 2 : Simple FM II - Effekt Harmonizer Scene 3 Granular Synthesizer - with rog~ program of IRCAM to generate a Japanese instrument Shakuhachi and Chinese Shen sound file.

Scene 4 Hoomei (Overtone) singing by performer, (light off eventually). Scene 5 the same as Scene 3. (Light on again) Scene 6 the same as Scene 2 but with Delay Effect instead of Harmonizer.

Scene 7 as Scene 1 Coda- bow down (Scene 8) Only use filter glissando. (ref. the Max/MSP Patches) 4. Performance Records

# Chao-Ming Tung(董昭民)



"Chao-Ming Tung is a Taiwanese-born composer and gu-zheng player (Chinese zither). His music encompasses stage, instrumental, vocal, and electro-acoustic works, and multimedia-performances with visual arts and dance. In 1988 he began composition studies with Chien Nan-Chang in the Chinese-Culture-University Taipei. He continued his training from 1990 -1997 at the MusikhochschuleKöln Germany with Johannes Fritsch and Mauricio Kagel, and later at the Folkwang-Hochschule Essen with Nicolaus A. Huber, where he graduated with distinction.Tung's work has been presented in concerts of numerous festivals throughout Europe, Asia, and the USA. He has collaborated with choreographers, dancers, painters, musicians, ensembles, sound-, media- and video artists, e.g. Annegret Heiln, René Pieters, Bernhard Gal, Klang Forum Wien, Ensemble Ictus, Ensemble Modern, ensemble 2e2m, Ensemble On-Line Vienna, ensemble DEDALO, and China Found Music Workshop Taipei. He was awarded the Bernd Alois Zimmermann Scholarship for Composers from the City of Cologne in 1999, the Scholarship of National Culture and Arts Foundation Taiwan in 2001 and Stipendium of Villa Aurora Los Angles 2004. From 2006 – 2007, he was composer in residence of China Found Music Workshop Taipei. Since 2007, he teaches composition at the Chiao Tung University in Taiwan."

#### "Heart Sutra" for guzheng and live electronics

"Heart Sutra" is composed for guzheng and real-time computer interaction in 2004. Using granular synthesis of the music software Max / MSP, the sounds of guzheng will be analyzed lively during concert and their pitches will be detected as midi values, for real-time modulations in the audio sample ( pre-recorded text of Heart Sutra), then the musician reacts on the modulations, and decides how he proceeds to perform. The Taiwanese calligrapher maestro Chin-Fa Cheng writes the Heart Sutra by intuition (intuitive calligraphy). From his artistic showcase, I was inspired to use the unpredictability of music form (open form) in computer digital music productions, to pursue the unification of human being (performer), God (computer), heart, and body in the total liberation.

# Chih-Fang Huang(黃志方)

Chih-Fang Huang, the Associate Professor at the Department of Information Communications at Kainan University, was born in Taipei city, Taiwan. He acquired both a PhD in mechanical engineering and a master's degree in music composition respectively from National Chiao Tung University. He studied composition under Prof. Wu, Tin-Lien, and computer music under Prof. Phil Winsor. His electroacoustic pieces have been performed in Asia, Cuba, Europe, and the USA, such as the electroacoustic piece "Microcosmos" were selected and performed in International Computer Music Conference (ICMC) in 2006, and the composition presented in CEMI (Center for Experiment Music and Intermedia), University of North Texas in 2010, and works performed in Berlin, Cologne, Sweden, Italy in 2011-12, etc. He is also the fellow of 2012 Art Music Residency, New York. In 2013 he was selected into the International Conducting Master Class of Martinu Philharmonic Orchestra under Mr. Kirk Trevor and Prof. Donald Schleicher, performing the works of Debussy, Brahms, etc. In 2014 he was invited to conduct the Greater Miami Youth Symphony (GMYS) orchstra. His research papers include many fields, such as automated music composition and the sound synthesis, which have been published in ICMC and international SCI/SSCI/AHCI Journals. Now he is also the conductor of the Taoyuan New Philharmonic Orchestra.

#### "Pavilion Farewell" for Soprano and Virtual Orchestra

This piece is based on the lyrics of Yuanqu "Pavilion Farewell" from "Romance of the West Chamber", and the five people Virtual orchestra, to integrate Quanqu singing and the contemporary electronics. It creates a special style in electroacoustic music, to attain the goal of fusion ancient and modern. "Blue cloudy sky, with yellow flowered earth, the west wind is blowing heavily. When the northern swans are flying toward the south, who will dye the frosty woods? The tears are full into the separating lovers'eyes!" The lovesickness is deeply carved into the classical Chinese lyrics. The electronic timbre of the piece is based on percussion and the soundscapes. Performers and Instrument Deign: Prof. Timothy K. Shih's MIME Lab, National Central University, Taiwan

#### **Performers:**

#### 國立中央大學數位管弦樂團

MINE Lab (Multimedia Information Networking Laboratory), National Central University

#### Prof. Timothy K. Shih(團長:施國琛教授)

Electrical Wind Instrument: Chi-Yen Lin (林祺彥) Electronic Drum: Roland HD15: Li-Ling Chang (張利伶) Computer: Jia-Ting Jiang (江佳婷) Virtual Kalimba: Ya-Ting Chang (張雅婷) Virtual Class: Yu-Ching Hsiao (蕭聿情) Virtual Ocarina: Chia-Yu Chang (張珈瑜) Virtual Ocarina: Guan-Yu Lin (林冠妤)

#### Vocalist: Chia-Lin Ling (凌嘉臨)

Well-known GuoGuang Opera Company (國光劇團) Chinese Opera Actress, lots of performances including Yu Opera - Peony Pavilion (牡丹亭), Matchmaker (紅娘), etc.







# Pei-Fen Huang(黃佩芬)



Pei-fen is a graduate student in the Department of Music of National Taiwan University of Arts. She was a resident composer in Ju Percussio Group and worked for Mozart Music Magazine as an editor. She is now a guest writer and music producer in the magazine Earth Citizen 365 published by Pan Asia International & Culture Co., Ltd and helps with the publication of both Chinese and English children's songs. She has been teaching ear training and sight singing for years. She also helped with the publication of numerous MP3s, CDs and books about ear training and sight singing with several publishers. Her art song<<The Remains of the Spring >> was selected by the Taiwan Council for Cultural Affairs in 1984. Orchetral work <<The Spring is like... >> was selected in the category of orchestra music by ICRT Young Star 1986. In addition to Ju Percussion Group, she also worked with National Taiwan Academy of Art Orchestra, National Taipei Teachers College Orchestra, Bachanalia Taiwan, FagottiCCmo and National Taiwan Symphony Orchestra. The trio <<Qi-W00>> was invited from the 2nd Sound of Dragon Music Festival on April, 2016 in Vancouver, BC. <<In the name of love>> was performed at Taiwan ROC Computer Music Society Annual General Meeting opening show. And invited performing at NWEMO 2016 Tokyo, NWEMO 2017 San Diego.

#### "In the name of love" for Flute and Electronic

Flute + electronics: The flute is a desire to act on behalf of independent thinking has been the life of the individual are not respected, prefabricated pre-recorded music and the performer flute alto flute sound, on behalf of a number of representatives from the same dignity kinship to Taiwan saying that "obedient, big eater for hello, ""these keywords, the people of Taiwan in the Republic of China after the Japanese colonial era continued militarism and militarization under the Nationalist government to Taiwan early education on management imposed on the parent's generation to the next by the issue in caring imperative languages qualities. Composer: Huang, Pei-fen is a graduate student in the Department of Music of National Taiwan University of Arts. She was a resident composer in Ju Percussion Group and worked for Mozart Music Magazine as an editor. She is now a guest writer and music producer in the magazine Earth Citizen 365 published by Pan Asia International & Culture Co., Ltd and helps with the publication of both Chinese and English children's songs. She has been teaching ear training and sight singing for years. She also helped with the publication of numerous MP3s, CDs and books about ear training and sight singing with several publishers. Her art song The Remains of the Spring was selected by the Council for Cultural Affairs in 1984. Her orchestral work The Spring is like...was selected in the category of orchestral music by ICRT Young Star. In addition to Ju Percussion Group, she also worked with National Taiwan Academy of Art Orchestra, National Taipei Teachers College Orchestra, Bachanalia Taiwan, FagottiCCmo and National Taiwan Symphony Orchestra Fiche technique.

## Flute / Pei Hua (華佩)

Pei Hua is a few unique active features flutist with 20 years of orthodox classical music; graduated with a dual professional master degree in French flute at Ecole Normale Super Paris.

Dedicated to teaching flute and chamber music, she has been teaching professionally in many primary and secondary schools in Taipei City, Taipei County and Hsinchu County, as well as working as assistant conductor for the Taichung Youth Orchestra. Every year she goes on tours attending national concerts and performing in cultural centers and is often invited to work with domestic and foreign composers, publishing contemporary flute works domestically and internationally. At the same time, she also frequently hosts classical music programs on radio, performs flute and chamber music in variety shows on TV, actively promoting the art of classical music in different fields.

She shows a variety of playing styles, presenting a unique popular sense on stage, integrating popular elements into the classical, without losing the original refined sense of classical music. Her repertoire is also diverse, including classical music, musicals, movie soundtracks, Taiwanese folk songs and aboriginal music, showing a deep musical perception. Implementing creative elements in each of her performances, which show rare vivacity in the field of performing arts, she is a flutist with a new and diversified style.

Upholding the right passion and conviction to promote the "heritage of flute music education", with outstanding and professional skills, Hua-Pei has received offers from many schools to teach their most gifted students.

#### **Education & Specialty Background**

- Dual master in flute and chamber music at Ecole Normale De Musique Paris
- Recommended by Pierre-Yver ARTAUD to <sup>『</sup>Orchestre de Flute Francais 』 at 2001
- Superior winner of  $\ ^{\mathbb{G}}$  Roger Bourdin Flute Competition  $_{\mathbb{J}}$  at 2003
- Show Host of <sup>T</sup>aichung Sun Radio FM89.1
- Show Host of  $\ensuremath{\,^{\ensuremath{\mathbb{T}}}}$  National Taiwan Police Broadcasting  $\ensuremath{_{\mathbb{I}}}$
- Music & Art Director of <sup>T</sup> Music Culture Association of Taiwan Deng, Yu-Xian <sup>J</sup>
- Creating Director of  $\ensuremath{\,\mathbb{F}}$  Voices of Spring Symphony Orchestra  $\ensuremath{\,\mathbb{I}}$
- Music Consultant of Taichung Association of European Creative & Culture Industries


## Yu-Chung Tseng(曾毓忠)



Yu-Chung Tseng, D.M.A., associate professor of computer music composition, director of music technology master program and laptop orchestra-CLOrk at National Chiao Tung University in Taiwan, R.O.C.. His music, written for both acoustic and electronic media, has been recognized with selection/awards from, Bourges International Electroacoustic Music Competition (Selected work /1998) /1999/2005), ICMA2011 Award, Pierre Schaeffer International Computer Music Competition(1st Prize/2003,3rd Prize/2007), Città di Udine International Contemporary Music Competition(Special Mention of Jury/ 2003, Winning work/2006), MUSICA NOVA International Electroacoustic Music Competition (Finalist/ 2004/ 2005/ 2007, Honary Mention award/ 2009, 1st Prize/ 2010), Metamorphoses International Competition of Acousmatic Composition (Finalist/2006/2008/2010). Mr. Tseng's works have also received many performances at festivals and conferences including 9 times International Computer Music Conference(China, Cuba, U.S.A., Singapore, North Ireland, Montreal,.....Hudersfield), Beijing International Electroacoustic Music Festival, Korean Soul International Computer Music Festival, SEAMUS National Conference, Shanghai International Electroacoustic Music Festival, Dusseldorf Schumann Festival, UCM New Music Festival, Tokyo Asian Digital Music Festival, Prague Musica Nova, Brussels Metamorphoses. He also received many composition commissions from National Foundation of Arts, National Chiang Kai-shek Cultural Center, Taipei Dance Circle, SuccPerc, National Taiwan Arts Education Center, Dance Forum, Council Hakka Affairs, and several instrumental performers. His music can be heard on Selected Electroacoustic Music of Yuchung Tseng (ISCM-Taiwan), CDCM Vol.28(U.S.A.), WOCMAT2006 /2007 /2009 /2011(TCMA), Discontact iii(Canada), Pescara 2004, Contemporanea 2006 (Taukay, It.), Metamorphoses labels 2006/ 2008/2010(Belgium), SEAMUS 25th Anniversary CD(USA), KECD2 (Demark), and Musica Nova 2009/2010 prizewinning CD(Czech), ICMC 2011DVD..Recent years he found his interests in NIME-integrating various technologies including sensors, wiimote, iPhone, iPad, laptop, self-designed instruments with Max/MSP, Live, Spat...software as new interface musical expression for both individual and ensemble performing purposes . He founded the first Taiwan laptop orchestra-CLOrk at Chiao-tung university.

# MusFit II-Gloves for Wireless-Controlled Multi-Channel Electronic Music

This presentation presents a wireless integrated wearable interactive music system - Musfit. The system was built according the intension of integrating the motion of hands (fingers), head, and feet of a performer to music performance. The device of the system consists of a pair of gloves, a pair of shoes, and a cap, which were embedded various sensors to detect the body motion of a performer. The data from detecting was transmitted to computer via wireless device and then mapped into various parameters of sound effectors built on Max/MSP for interactive music performance.

The ultimate goal of the system is to free the performing space of the player, to increase technological transparency of performing and, as a result, to promote the interests of interactive music performance.

At the present stage, the progression of prototyping a wireless integrated wearable interactive music system has reached the goal we expected. Further studies are needed in order to assess and improve playability and stability of the system, in such a way that it can be effectively employed in concerts eventually.

#### Program Notes / 樂曲解說



## Yu-Xuan Hua(花瑜萱)

I am a student at the second year of the Department of Information Communication Design at Ka Nan University.My name is HUA YU-XUAN, my work is the forest in the storm.

## Storm in the forest

In all kinds of beasts and insects in the barking of the jungle to storm, The moving storms come and go in different jungles, in that moment Quiet storm which disturbed the tiny communication radio, Communication radio waves in the jungle when there is no time, From time to time came the sound of jungle birds and insects song bird.



## Wuan-chin Li(李婉菁)

Philippine composer Dennis Deovides Reyes III is a doctorate student from the University of Illinois at Urbana-Champaign, whose compositions find inspiration from Asian music to modern art, and Philippine tradition.

## The Wind Bloweth Where It Listeth

"The idea of this work was from Bible, John 3:8:"The wind blows wherever it pleases. You hear its sound, but you cannot tell where it comes from or where it is going. So it is with everyone born of the Spirit...."" The sound samples processed, twisted and stretched. Most of the elements extended to a longer duration. Like hearing very clearly to each wave in wind, carries the spirit, which can be felt, heard but not seen. This work hopes to transform the concept of "feeling without seeing" to "hearing without seeing", and represent this sentence in Bible via a different way to explain to audiences. About Wuan-ching Li (Sandra Tavali) Of the Siraya people, Sandra Tavali is a former keyboardist of the well-know metal band "Chthonic". She is the composer for the TV documentary "Unknown Taiwan" produced bythe Discovery Channel. Also, she was the artistic director of the musical "Dark Baroque." Her musical works crossover between classical and fine art, film and documentaries . Ms. Li earned the Master of Music degree in Computer Music from the Peabody Conservatory of the Johns Hopkins University in Baltimore, Maryland, USA. Where she studied computer music performance and composition with Prof. Geoffrey Wright."



## Anna Terzaroli

Master's degree in Electronic Music from the Santa Cecilia Conservatory in Rome, where she is currently completing her Composition studies. Selected and performed in many events in Italy and abroad.

### Overcome

In this work most of the sounds originate from soundscape recordings.

The sounds were processed and the they were composed together to lead to "Overcome". The acousmatic music, whose characteristic is to not reveal the source of the sound-generating, favors a greater concentration on the sound itself, so it's possible appreciate characteristics and peculiarities, mostly unheard, of the sound.



# Lin Shen(申林)

SHEN Lin is associate professor of the Shanghai Normal University - Music College, Director of the Music Technology Department, Vice Chairman of Shanghai Computer Music Association

## Bell and Drum on the Mountain Forest(山林鐘鼓)

"Bell and Drum on the Mountain Forest" uses the electronic acousmatic techniques, with the plate sound sample transformation like the percussion, to get the similar sound of East temple bells and drums and the Western church bell, and other sound materials.

Through the sound re-combination, the result is to fuse the music of space, time, geographical and other aspects of the formation of the East and the west, ancient and modern, into the "landscapes with the sound".



## Yu Li(李嶼)

Li Yu,(1993-China) Since 2010, she has studied at Wuhan Conservatory of Music, majoring in electronic music and keyboard.

## A Cobweb over in the Meadow(草叢裏的蛛網)

In this piece, I want to show what was happened in a cobweb over in the meadow.



# Ayako Sato(佐藤 亜矢子)

Ayako SATO is doctoral student in Tokyo University of the Arts. She was awarded the honorary mention of Destellos Competition and the third prize of Prix Presque Rien etc.

### tiny fragments of his dream houses

Where did his dream houses disappear? He has gone. I dedicate a small music made by the fragments of reminiscences to him.

This music was constructed from 200 broken pieces of the music that was composed for the last video of a certain artist.

#### Program Notes / 樂曲解說

## Ken Paoli

Ken Paoli is a musician comfortable in any musical situation...from commercial production and synthesizer programming to Broadway shows and Vegas' acts to jazz performance and experimental composition. Ken received his undergraduate training at DePaul University, studying composition with Phil Winsor. His graduate degrees are from Northwestern University, where he studied composition with Lyndon DeYoung and M. William Karlins.

He has worked with Frankie Valli and the Four Seasons, Bobby Vinton, Red Skelton, Vickie Carr, Marilyn Michaels, and Broadway shows including Joseph and the Technicolor Dream Coat, Music of the Night, 42nd Street, Peter Pan, Annie Get Your Gun, Beauty and the Beast, Mama Mia, Cabaret and Godspell. His arranging skills and synthesizer performance and programming ability have been displayed on many radio and television commercials for corporate advertising including McDonalds, Kentucky Fried Chicken, Oster, Capri Sun, Velamints, Kirby, and Schlitz.

Working as a consultant in the areas of audio and computers, Ken has designed sound installations, recording studios, acoustic treatments and synthesizer/sampling performance rigs. As a music journalist he has contributed interviews with new music composers, articles on music technology, and theory and analysis, Ken has taught at DePaul University and Western Illinois University where he was the chairman of Music Theory and Composition. While at Western Illinois he founded the New Music Ensemble, the New Music Festival and studied digital synthesis at the MIT Media Lab under the direction Barry Vercoe. He is currently the Director of Technomusicology at College of DuPage in Glen Ellyn, IL. During his tenure at College of DuPage Ken has established a state of the art recording facility and computer teaching classroom.

His catalog of works includes music for orchestra, acoustic ensembles, electro-acoustic combinations and algorithmic computer-assisted compositions.

Ken resides in Wheaton, IL and maintains a busy schedule of teaching, performing and writing in the Chicago-land metropolitan area.

### Cathedral

Cathedral portrays a majestic fractal landscape. The audio was generated with a form based algorithm that simultaneously manipulates tempos, rhythm grouping and dynamic mapping for multiple synthesized sound sources.





# Xiao-Hu Du (杜嘯虎)

Xiao-Hu Du, teacher from Composition Department of Wuhan Conservatory, Graduated from Central Conservatory of Music  $\cdot$  He has composed many film and ballet music.

## Changing

The track is featured by Chinese ethnic percussive music and compiled through electronic means. In this way, its composer tries to enable audiences to feel a brand new musical expression combining traditional Chinese musical instruments and modern technology.



# Chen-An Tai(戴晨安)

I'm Chen An Tai. I love music and want to be a composer and mixer. Although I haven't had a chance to learn any instruments before, but I will try everything to accomplish my dream.

## A million shrimp

Creating the music like shrimp group moving under the water.



# Yi-Huei Chen(陳宜惠)

Yi-Huei Chen is a Ph.D. candidate of Institute of Applied Arts, National Chiao Tung University in Taiwan. She is also a freelance electroacoustic composer.

## The Edge of Chaos

In the sciences in general, the edge of chaos has come to refer to a metaphor that systems operate in a region between order and either complete randomness or chaos, where the complexity is maximal.



## Benjamin O'Brien

Benjamin O'Brien holds degrees in music composition and mathematics from the University of Florida (PhD), Mills College (MA), and the University of Virginia (BA). He lives in Marseille, France.

The Loop Metallic. Sinusoidal. The loop

#### Program Notes / 樂曲解說



# En-En Chen(陳恩恩)

陳恩恩 (CHEN, EN-EN), studying in Graduate Institute of Musicology in Taipei National University of the Arts.

## Keep Going

There is always an original goal when I start a study, creation, work or mission. As time goes on, many ideas, opinion and other people's suggestions increases. Some of them bring me positive effects. However, some of them confused me, even make me almost forget the original goal at the beginning. Even though, I still insist to achieve it. After a period of blank time, I retrieve the original goal and make it better and better.



# Chia-Hsiang Lee(李家翔)

Lee Chia-Hsiang, was born in Taichung, Taiwan, studying at National Chiao Tung University-Master program of Sound and Music Innovative Technologies.

**Chaos** Life and reality.



## Chu-Huan Lo(羅珠環)

She's from Taichung, Taiwan.(R.O.C). Student from Music Master of Continuing Program .Department of Music. National Taipei University of Education and teach Chinese Music. Because I majored in Liuqin (musical instrument) at the Chinese Culture University(1993-1997)

## The Surging Billowy Era(風起雲湧)

"The composition aims at mirroring the state of the art of the twenty-first century. Unexpected new ideas and new things which are inspired by the advanced technology and novel innovation spring out successively and overwhelmingly. As a result, people develop as sense of uncertainty, turbulence, and helplessness, feeling that it is difficult, even impossible, for them to grasp their future."

# Leigh Landy

Leigh Landy holds a Research Chair at De Montfort University (Leicester, UK) where he directs the Music, Technology and Innovation Research Centre. His scholarship is divided between creative and musicological work. His compositions include several for video, dance and theatre and have been performed around the globe. He has worked extensively with the late playwright, Heiner Müller, the new media artist, Michel Jaffrennou and the composer-performer, Jos Zwaanenburg and was composer in residence for the Dutch National Theatre during its first years of existence. Currently he is artistic director of Idée Fixe – Experimental Sound and Movement Theatre. His publications focus on the studies of electroacoustic music, including the notion of musical dramaturgy, contemporary music in a cross-arts context, access and the contemporary time-based arts, and devising practices in the performing arts. He is editor of "Organised Sound: an international journal of music technology" (CUP) and author of eight books including "What's the Matter with Today's Experimental Music?". "Understanding the Art of Sound Organization" (MIT Press) and "The Music of Sounds" (Routledge, 2012). More recently his ebook, "Compose Your Words" was published (Intelligent Arts, 2014) and the co-edited book (with Simon Emmerson), Expanding the Horizon of Electroacoustic Music Analysis (Cambridge University Press, 2016). He directs the ElectroAcoustic Resource Site (EARS) projects and is a founding director of the Electroacoustic Music Studies Network (EMS).

#### Xun

The story of this work starts when the President of the Shenyang Conservatory of Music gave the composer a gift of a replica traditional xūn from Liaoning Province asking him whether he could make an electroacoustic composition with this instrument. This work, the successor of the Musicacoustica 2013 (Beijing) commission, "China / Music Old / New" is the result. Its source material consists of samples taken from a recording made at the Tianjin Conservatory of music in June this year. Only one sound was transposed to support musical coherence; all others are exactly as recorded. Li Yue played pieces and recorded various techniques on four different xūns; it is this material that has been recomposed on the 8-channel recording. The goal is to celebrate the xūn's rich tradition and demonstrate that it can sound very new, too. It has been composed exclusively for Li Yue and exists in a 'mixed' 8-channel and live xūn version as well as the 'fixed-medium' 8-channel version performed at this concert .

Note 1: Channels 1/2 are front left / right; 7/8 are rear left/right (looking forward) and  $\frac{3}{4}$  and 5/6 are sides moving backwards in the performance space. Note 2: Please translate the title and this text into Mandarin.



# WOCMAT2016 Sound Gallery

#### Antonio D'Amato - Volumina

Volumina is a symbolic soundscape representing big masses motion, with an initial effort towards an infinite acceleration.Nevertheless the piece doesn't provide a direct representation, but a mental image of an unlimited strain and its outcome, with the accumulation of a not-quantifiable amount of energy.

## Hsin-Jia Chang(張信加) - The Spark of Chinese Instruments

The main idea of this composition is make lots of Chinese instruments sparkling. I use different instrument like pipa, bangze, etc, in this composition, and try to make their own characteristics obvious. So everyone may hear different kinds of Chinese instruments like spark fly through the composition.

## Lin Shen(申林) - Alley Children with Happy Moments(巷童雅趣)

"Alley Children with Happy Moments" uses the Shanghai area nursery rhyme as a the sound material for electronic music creation works. In this piece, the author composes the new electronic music materials through multiple transformations from the original sound materials, and re-build the relationship among them, to create "the real or the unreal " pictures of the children's joyful playing time.

## Po-Yu Wang(王柏又) - Jie(界)

全曲以各種對比為創作主軸 · A 段以反轉(reverse)、改變音域(pitch shift)及殘響(reverb)等效果處理動機素材以創造時序、音高及空間的對比 · B段以固定低音(basso ostinato)開展 一高動態段落 · 與 A 段呈結構上之對比 · 尾奏回到 A 段動機前後呼應結束全曲。

#### Xiao-Hu Du (杜嘯虎) - Reverse

The track featured by "turn the pages" and compiled through electronic means. The use of a large number of "Reverse" and other audio processing technology, intended to showed gorgeous sound effect.

### Yung-Hui Yang(楊詠惠) - Into the dream

I was on a boat in the dark, from far away to see a white light and accompanied by some metal sounds, I was sliding along it. The soundsuddenly appeared and I tried to catch it. tick tock tick tock! Call me back to reality.Oh! It's just fell into a dream.

## Yu-Tung Cheng(鄭宇彤) - Tooth Pain

For the past two months, waking up has actually hurt. Do braces hurtwhen you first get them? It does hurt. Using the sounds that were distorted, granulized, this piece prescribesthe sharp pain happened on me since the day I put on braces.

#### Zhibo Xu(徐志博) - Body Music

The piece for human body improvisation and live-electronic, uses sensors and triggers to detect, extend, transform the performer's body motions to sounds. Overcoming inferior richness of the living sound generation and expression, some edited sound samples and segments are complementally organized to construct the music form. To further artistic aim, the improvised body motions are designed in a narrative way but not in detail which have interactive relationships between living and prepared sounds.

#### Chia-I Lin(林佳儀) - Ignition

Ignite a match in the quiet night, hearing someone summon you in this tranquil nighttime sky, and you'll find the secrets in silence of the nights.

### Sunhuimei Xia(夏孫惠美) - Looking in the Mirror

This piece represents a musical illusion in the mirror. Using audio samples and signal processing to produce an unstable feeling.

#### Chin Ting Chan(陳展霆) - Oceanus

In Greek Mythology, Oceanus was portrayed as a Titan. As one of the many sons of Uranus and Gaia, he was believed to be a river that encircles the world. I borrowed the name Oceanus for this piece to depict water in a natural environment. This piece is roughly divided into three sections. The first section consists of only sounds of water. The sound of the rain and a non-processed thunder strike mark the beginning of the second section, which also feature a multitude of animal sounds. The last section incorporates combination of sounds from both previous sections.

#### Omar Peracha - You Can Run - I

The piece explores the application of timbrally-derived harmonic andstructural frameworks in an electroacoustic context. Spectral information from a spoken phrase, namely 'you can run, but you can't hide', was used to generate material for the piece.

#### 郭彗木 - 叮鈴

The works are all collected from two bicycles sounds.

#### Jia-Hua Tsai(蔡佳樺) - Listen。Cicada

Cicada's voice as the center. From the perspective of cicadas to hear life around and the voice of nature.

#### Sound Gallery / 聲音藝廊

#### Cixian Lu - Again, Still, Yet...

This composition, is for three violincello players and prepared electronic sound. It is finished on the 8th of October, 2016, in Baltimore. The work is inspired by the experiences at concerts that every time before formally playing the music, musicians always adjust their chairs. The sound of the chairs rubbing the floor is heard by audiences each time before the music. The composer think this special sound of chairs is a part of the performance also. Extend this idea further, the everyday practice of the players contributes to the on stage performance also. So the composer writes the work again, still, yet is a tribute to musicians' every-day practice. According to the title of this work, the music also uses repetition of the same music phrase. What's more, when performing this work, three cello players cooperate with the prepared electronic sound. The electronic uses different sound made by chairs as materials, and uses electronic sound effect, like filter, loop and so on. Also, three violincello players sometimes imitate the electronic sound.

#### Shi-Jie Wang - Rain

Shanghai is a place where it rains frequently, This work is about a rainstorm in Shanghai . The sound distortion of this work comes from the sound sampling of the accordion, There are various accordion playing skills. The beginning of the work refers to the deformed sound of the accordion box, a bit like wind chimes, used to replace the prelude to the storm, which leads to the middle of the torrential rain from the scene, the middle is also mixed with heard from the far and near the rain. Finally, until the storm gradually become smaller and then use a wind bell ended .

#### Yi-Xuan Zhao(趙藝璇) - Dice

There are a lot of choices in life. Throw a dice, leave everything to destiny, there may be something unexpected.....

#### Shih-Hsin Wu(吳世馨) - 躁動

試圖做出很多像被吸進去的音效 · 已造成一種隱約節奏的律動感 · 然後再搭配一些經由裁切 材料所產生的元素 · 加上音高的音樂素材 · 作品不會聽起來只有單純的節奏變形 · 而是聽 覺上豐富的躁動感 ·

#### Chin Ting Chan(陳展霆) - Kaiachi I

Katachi is a Japanese term that means form, shape or figure. In the ancient game of Go, the word Katachi is used to describe the formation of stones on a Go board (Go is originated from Ancient China, where it is known as Weiqi). The conception of stone formationin Go is transformed to apply to the circulation and combination of sounds and timbre in the music.Katachi I uses primarily sounds produced by the Go stones, boardand bowls. The circulating effect created by the different panning techniques is a dominant feature in this piece. The stereophonic image thus produced represents a recurring form or shape much similar to an image of a pentagon garden.

#### Cheng-Yuan Huang(黃乘緣) - Daydream

Everyone have experienced some adventures in their daydream. This is the man's special journey of outer space in the daydream.

### Lee Cheng(鄭重言) - Citywalk

This multimedia work captures the city's ambient sound as the source of material for music-making. The recorded ambience of cityscape undergoes a series of filters and effect units which convert the meaningless signals to artefacts of the work. Values and meanings are therefore injected to the ambient sounds of the city, which are usually regarded as unwanted noise to the general public.

#### **Chenxin Zhu(朱晨欣)** – Hearing the Chinese antique clock in Hanshan (寒山聞鐘)

Hearing the Chinese antique clock in Hanshan, Hanshan refers to a Temple located in Suzhou and the Chinese antique clock refers to the an antique clock in Han Shan Temple. According to the record, the antique clock will be struck at middle night everyday. Nowadays, the custom of stricking has been remainded, the antique clock is struck for 108 times which means praying at everydays morning and night.

All the sounds in the work are transcribed in Suzhou, including the sounds of Chinese antique clock in Hanshan Temple, the excerpts from Suzhou Pingtan, the cymbals of Suzhou Street, the broadcast of tram in Suzhou dialect, and the sound of the sharpening for the knivies and scissors. The sounds of the Chinese antique clock that pass through the whole work just refers to the sounds of the antique clock in Hanshan temple which is transcribed by the author in Suzhou.

The beginning work of the antique clock has been distorted , and added the effection of delay and reverb, The first sound of clock triggers the cry of birds which represent the hope. The second and the third sound triggers sound of Suzhou Pingtan near and far , the original material sound of the Suzhou element began to be added in it , male voice of Suzhou Pingtan and female voice of the broadcast for tram ,stand in the left and right channels to come into being the form of a dialogue. The Deformed sound has the sense of the feeling of escaping from reality at the same time and that slowly promote the development of works. The deformed sound of clock , takes shape of rhyming texture in different tone and acoustic, The middle frequency is the recorded sound of sharpening scissors and then deformed to be the "noise". The bottom of low frequency and upper floating of high frequency makes the work come to the climax and then immediately to be calm down. Meanwhile, the sound of the antique clock reappears ,so the work come to the reality without any effect device.

#### Ya-Jun Cai(蔡亞峻) - Four Elements

I try to use the different kind of effects to describe the four elements in this piece. The sound of Flame is like the wood burned, the howling sound is the representation of flowing Air, the humming sound is mean to the Earth, and last one the Water sound is depicted by water fall. All of them are put on a Metasurface via Interpolation to make continuous sound.

#### Massimo Fragalà - PF121012

All the sounds that form this composition derive from the elaboration of two piano samples(a3 and tapswpedal). Starting from this two samples I tried to change their physical characteristics in order to generate a range of sounds more o less different compared to their original variety. This was possible using particular technique of sound processing such as spectral stretching, waveset distorsion, waveset enveloping, octave stacking, etc... This composition has been realized on linux kxstudio.

#### Sound Gallery / 聲音藝廊

## Xiao-Dong Jiang(蔣曉東) - Coke cans

Drinking Coke make me feel awesome !

### Cixian Lu - sacenme subhūte

The first composition is a 90 seconds' extraction of the work sacenme subhūte, which inspired by the text from Vajracchedika-sutra. It was accomplished in April 2015, at Shanghai Conservatory of Music. The lyrics of the work are composed by Sanskrit. The voice is recital sing the lyrics breathily. Piano uses special sound from strings and the piano board, correspond to accordion and electronic sound. In addition to express the thought about the scriptures why so, Subhuti!', it also ask the public to have the Bodhicitra.

## Niklaus Zhao(趙沁陽) - No Zither(無 箏)

The interactive electronic music work " No Zither " presents the distinctive electronic music in a novel way, adopting the Chinese folk instrument Zheng and the modern science and technology mutually blending the form, has manifested "the nation is the world" thought. by means of modern scientific and technological means, the sound of real-time voice changes, the introduction of the visual picture of the visual concept. LaoZi said that " Everything on the earth is generated by being and being comes from nothingness." The author named " No Zither " is to take this " No" to express the sound of this work is given a changeable infinite form, through the use of ancient China National instruments zither to listen to a refreshing audio-visual experience.

## Ya-Jun Cai(蔡亞峻) - Water, Door, and Wrapper

This is my first time to compose the electronic music. I used the pouring water and flush sounds as intro. In the middle, I created the rhythms via the door sounds arranged. I also add some wrapper sounds as noise to make music more interesting. The pouring water sound added again in the end to recall the beginning.

## Long-Ching Yu(余朗晴) - A Falling Rainbow

A rainbow is always a symbol of hope and glory. But what if a falling one? Will it feel hopeless to find that even a rainbow collapses? Or will it be inspiring to see that even a sinking rainbow is beautiful? This work, written by a young composer who is searching for her identity, is dedicated to all who are at a loss — Never lose hope.

## Po-Hao Chi(紀柏豪) - Repetend

This work is mainly transformed from the cheers sounds in the original recording, combined with the repetitive ambient phrases and field recordings to connect the rhythm from interactions between intrinsic and extrinsic influences on individuals. Rhythm, could be considered as repetitive movements, but not just any repetition. It is also the regulation on our behaviour and will. By observing the repetition, rhythm enters into a general construction of time and consequently into its philosophical problematic: repetition and becoming, the relation of the Same to the Other. The repeated dialogs and soundscapes concealed behind these evolving drones are just like a footages of personal life experience as well as the unescapable cycle that represent the efforts we made but in vain.

#### Hsiao-Yen Wang(王曉燕) - Ethereality

This conception of the music comes from my own thinking is no longer the world's family, often there are times when I miss her, did not know her well, right now? And Miss process, through doing this song express how I feel, I love the sound of Ethereal to express my thoughts. I personally feel that Ethereal sound is a great sound, it allows me to play free to imagine ideas, so I chose to use a small amount of material, sound distortion, portraying the mood I like.

#### Patricia Martinez - A sign

A sign is electroacoustic mirco-piece in a form of sigh: a sign of life, a sign of needs to create a new reality into this world.

### Chen-an Tai(戴晨安) - If Trump win

In order to create a tragedy feeling, I using some sad sound e.g. crying, screaming and so on.

### Zhihao Wang(王志豪) - Hatred

The works use the Chinese guzheng as the sound sampling material, and use the sound after the music and the deformation to design and construct through the material of the different interval relationship, thus forming the conflict between the musical effect on the auditory effect and the non-musical sound. Works about the nature of human uncivilized phenomenon of crying, complaining. Hope that through the spread of electronic music works in the form of expression, we can not see, can not hear the inner discontent of nature, intended to warn us the importance of human environmental protection.

### Min Hu(胡琬茗) - Life

An image of life.

#### Patrick Gunawan Hartono - 90 seconds of Chaos

Fixed media composition that inspired by Gendy of Iannis Xenakis. In this composition I used "Gendy" Ugen of Supercollider to generate stochastic timbre.

#### Chiang Pan(潘將) - Dark Lane

Just read the horror film

#### Yan-Ru Chen(陳妍如) - Idea

Sometimes sounds like an idea and you don't know what the next step will happen. It makes us looking forword to a surprise. In this music I use the sounds of nuture to create my ideas.

#### Sound Gallery / 聲音藝廊

## Hsien-Te Hsieh(謝賢德) - The Absurd Word

Rain in the city looks always a bit confusing, but romantic. This electronic music uses rain and thunder through the whole piece. This piece also mixed with the streets of the human voice and the bell. Through the deformation of the sound so that the sound is more rich and full.

## Benjamin O'Brien - cila.rand

cila.rand is an étude written in SuperCollider and several versions exist, all of which play with ideas based on machine listening, chaos, and noise.

## Hsiou-Hui Kao(高琇慧) - operating system5153

Industry machine monster shifting in the space. Disappeared.

## Li-Ru Chen(陳俐儒) - Jungle Fantasy

Using sound samples of wide life, such as snakes, polar bear, etc., with proper sound transforms and Latin-based rhythms to compose an atmosphere of jungle world.

## Wan-Yun Teng(鄧婉芸) - Dancing Stars(律動的星星)

This work is ternary form (A-B-A). Use percussion instrument like conga and bongo. A lot of rhythm in this work. Use a little "Twinkle, Twinkle, Little Star" melody in the work.

## Hui-Wen Liu(劉惠文) - Dark

An abstract piece of music. Like the alien into earth, do some unknown things, finally left on a rainy night.

## Yi-Chen Wu(吳宜蓁) - 無回應

以冰冷的 google 女聲電腦語音·來說出台灣話用來打招呼、充滿人情 味的問候語「你吃飽 了沒」但是在樂曲中沒有得到回應·只有問句的聲 音片段·和細微的噪音不斷迴響的冰冷空 洞聲響·表示人心中的焦慮和不信任。

## Jack Shi(時昊) - Ancestral shout

The sampling of piece contains the Mongolian Khoomei, Mongol stringed instrument and playing the tongue ,which express the supreme reverence for an cestral. The music has jointly developed in the sampling of the "concrete" Sound and the "abstract" electronic music after deformation technology.

## Margarita Cheung - Time Traveler

The big ben is ringing on the left, and the clock is ticking from my mind. Are you calling me at your era, my dearies? So I am starting my journey, traveling thro' time. Finally I am here, we are enjoying the coffee at the crowed corner as always. Soon, the big bell Dong, and you seems getting shocked. I am awaken by the broken bell of the old clock tower, looking around and out there is just silence. Is it a dream?

#### Daniel.J.Miller - Rice.Lightning

In December 2013 I was living in an old house in Maguro, a residential ward of Tokyo. Despite its metropolitan reputation, Tokyo's quietude is one of its most striking features. One evening, my attention was captured by the fascinating sounds emitted by the ceramic rice pot cooking on my stove. The subtle buzzing of metal and steam recorded on my hand-held digital recorder, amazingly clear and crisp in the silence of a winter evening, still evokes for me memories of this cold, timber-frame house with its tatami mats and paper screen walls. In writing this miniature, I restricted myself to using only this single recording. I attempted to preserve the delicacy of the sound, building an expressive arc on a small scale without the use of extensive processing or layering. The title, Rice/Lightning, was inspired by a haiku by Kawahigashi Hekigot ō (1873-1937). In the context of rice eaten after a fast, Hekigot ō writes the word for a lightning flash (inabikari) with the character normally used for a rice plant (ine), evoking the contrast, sudden insight, and focal point that both experiences symbolize. (Higginson, William J. The Haiku Seasons: Poetry of the Natural World. Berkeley, CA: Stone Bridge Press, 2008.)

#### Dong Zhou(周東) - Dance in Industrialized World

In an industrialized world, you can still dance. But sometimes you can not stop. The sound form past time is still on your mind, but it also doesn't help.

#### Sheng Yu Chen(陳晟宇) - Soul

Everything is forget

#### Yi-Huei Chen(陳宜惠) - Transition

Transition, with many meanings, is a process from one phenomenon to another in this piece. This transition specifically takes place within a human body.

#### Miguel Chambergo - On Being Sane In Insane Places

A trip to my inner demons and fears. What do you think of every morning when you look at yourself in the mirror? While you shave, what feelings do you have? Are you satisfied with your life? Are you moving forward or stuck back where you started? As you see, you arenot getting any younger. What are you afraid of?

#### Sheng-Yu Chen(陳晟宇) - Roof

Everything is forget

#### Ayako Sato(佐藤 亜矢子) - to be tied with...

This piece is a small part of reminiscences of her journey. Though it took considerable time, and it became different from the original... but strongly it was connected. "Usual scenery" on some "knots" was tied as small music.

Performance of Banquet / 晚宴表演

# Performance of Banquet 采虹樂坊

Rainbow Ensemble (Quintet): Traditional Chinese Music (25-min.)

Erhu: Pei-Yu Liao Bamboo Flute: Chia-You Chen Pipa: Yi-Chun Cheng Yangqin: Wei-Ting Chen Ruan: Hsin-Chieh Yu

Funded in 2010, these excellent musicians who award lots of Chinese music competition prizes in Taiwan, perform lots of concerts domestically and internationally every year. In additional to the traditional form of Chinese music, Rainbow Ensemble also create the new arts to integrate contemporary arts, pops, and western classical music interdisciplinarily to bring the new ideas for the audience. Rainbow Ensemble was invited to perform in Headspring festival 2012, and be the opening performance in Character Art Festival , which was organized by Taipei City's Department of Cultural Affairs 2012. In 2013, they cooperated with Body Expression Dance Theater "BodyEDT", made a new performance "Mr.R "/"Mr. Rabbit" in Taipei Experimental Theater, combining technology, origami device, improvising music, and dance.

#### Program:

- 1. Bamboo Tune
- 2. Horse Racing
- 3. Autumn Moon over the Calm Lake
- 4. Blooming flowers and full Moon
- 5. Stories of A Small Town
- 6. Craving for the Spring Wind
- 7. Happiness




