



ISMIR

Taipei • Taiwan

27-31. OCTOBER 2014

15th International Society for Music
Information Retrieval Conference



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WELCOME MESSAGE

Welcome to the 15th ISMIR (International Society for Music Information Retrieval) Conference in Taipei, Taiwan where you'll enjoy a mild sub-tropical climate, gourmet cuisine and exotic fruits, easy and informal hospitality and a thriving and fascinating cultural scene.

ISMIR is a world leading technical forum on the processing, analysis, retrieval, and visualization of music. According to Microsoft Academic Search, based on citations over the past decade, ISMIR is among the top 3.7% of all 2710 computer science related conferences worldwide. Besides striving for academic excellence, we have also tried our best to keep ISMIR an open, friendly platform for sharing technical and cultural aspects of music and music related data.

ISMIR-2014 would not have been possible without the tremendous effort of many people. We would like to express our deep gratitude to the Program Chairs, Dr. Hsin-Min Wang, Dr. Yi-Hsuan Yang, Prof. Jin Ha Lee, and their PC members and reviewers for creating such a high quality technical program. Our special thanks also go to Prof. Jia-Lien Hsu and Prof. Wei-Ho Tsai (local arrangements), Prof. Ming-Feng Tsai (finance), Prof. Jia-Ching Wang (registration), Dr. Li Su (tutorials), Dr. Ju-Chiang Wang (late-breaking and demo), Prof. Jeff (Chih-Fang) Huang, Prof. Yi-Wen Liu, and Prof. Yu-Chung Tseng (music), Prof. Ching-Hua Chuan and Dr. Gang Ren (publications), Prof. Ye Wang (publicity), and Eric Humphrey (unconference).

We sincerely hope all participants benefit greatly from this conference and

have fun attending it. We wish you all have a wonderful and unforgettable stay in Taipei, and hope you come back to visit us again soon!

Jyh-Shing Roger Jang (National Taiwan University, Taiwan)

Masataka Goto (National Institute of Advanced Industrial Science and Technology (AIST), Japan)

Xiao Hu (University of Hong Kong, Hong Kong S.A.R., China)

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- Xiao Hu (University of Hong Kong)

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- Yi-Hsuan Yang (Academia Sinica)
- Jin Ha Lee (University of Washington)

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- Malcolm Slaney (Microsoft)
- Frank Soong (Microsoft Research Asia)
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Publicity Chair

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- Matthew Davies (Institute for Systems and Computer Engineering of Porto, Portugal)
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- Emmanuel Vincent (Institut National de Recherche en Informatique et en Automatique, France)
- Anja Volk (Utrecht University, The Netherlands)
- Ju-Chiang Wang (University of California, San Diego, USA)
- Frans Wiering (Utrecht University, The Netherlands)
- Kazuyoshi Yoshii (Kyoto University, Japan)

GENERAL INFORMATION

Conference Venue

The Grand Hotel, Taiwan

(<http://www.grand-hotel.org>)

Address: No.1, Sec. 4, Zhongshan N. Rd., Zhongshan Dist.,
Taipei City 10461, Taiwan (R.O.C.)

Tel: +886-2-2886-8888

Fax: +886-2-2885-2885

The 2014 International Society for Music Information Retrieval Conference (ISMIR2014) is being held at the Grand Hotel. Supported by red columns and with golden roof tiling, the Grand Hotel stands midway up Yuanshan, much like a majestic 14-storey palace. Facing Keelung River, the hotel offers an amazing view of Songshan District to the East and Danshui to the West. Since 1952 the Grand Hotel has been hosting foreign dignitaries from around the world, and it is still the first choice of residency for visitors to Taiwan.



Floor Plan

Location		Event
Main building: 1F	Grand Garden Restaurant	Lunch (Tue. 28th)
Main building: 1F	Song Ying Room	Reception
Main building: VF	Golden Dragon Restaurant	Lunch (Wed. 29th)
Main building: 10F	Auditorium	Opening Keynote speech Oral session Concert Business meeting Panel discussion MIREX Unconference
Main building: 10F	Song Bo Room	Tutorial Poster session Women in MIR Mixer MIREX Late-breaking and demo Unconference
Main building: 10F	Chang Chin Room	Tutorial Late-breaking and demo Unconference
Main building: 10F	The Grand VIP Room	Unconference
Main building: 12F	Kunlun Hall	Banquet
Subsidiary building	Yuan Shan Club of Taipei	Lunch (Thur. 30th)

*Note: Please refer to pages 55-59 for the floor maps.

Internet Access

1. In the conference venue: We provide free wifi access. The SSID and password will be available on the registration desk.
2. iTaiwan : The iTaiwan service available to foreign visitors.



Government Indoor Public Free Wifi Access service

Online Registration System : <http://itaiwan.taiwan.net.tw/Index.aspx>

How To Register iTaiwan: <http://itaiwan.taiwan.net.tw/HowTo.aspx>

How to apply:

If you are a foreign visitor and would like to use iTaiwan service, you can present your passport or entry permit (for Mainland China residents) at a Travel Service Center located at any major airports, train stations or mass rapid transit (MRT) stations in Taiwan. After the service personnel applies for an account number for you, you can use the account number to access the Internet at any major indoor public area in Taiwan free of charge. Information on Travel Service Centers is as follows:

1. Travel Service Center, Tourism Bureau Located at Taiwan Taoyuan International Airport, Kaohsiung International Airport and Travel Service Center, Tourism Bureau.
2. County and City Visitor Centers Located at Taipei Songshan International Airport, major mass rapid transit stations in Taipei, Taipei Main Station, major airports and train stations in counties and cities, and High Speed Rail stations.

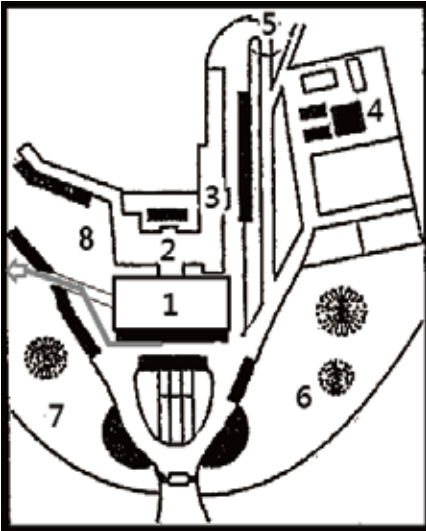
You can also use a native mobile phone number or a native prepaid card number to register a account for the use of iTaiwan service or register for a TPE-Free account to log onto iTaiwan service.

Name Badges

All attendees must wear the name badge at all times throughout the conference. Each attendee will be receiving tickets to all events that should be kept in the name badge and show to conference staff upon request.

Lunch Options

The conference allows one hour and a half for meals, so you may have your lunch at the restaurants of the venue. Free lunches (via coupons) are offered at the restaurants of Grand Hotel during Oct 28th to Oct 30th. If you'd like to have meal in the places outside the Grand Hotel, we recommend you to take the free shuttles offered by the Grand Hotel to the MRT Jiantan station. Still, you can also walk down the path showed below to the MRT Jiantan station.



1. Main Building
 2. Golden Dragon Restaurant
 3. Chi-Lin Pavilion
 4. Yuan Shan Club of Taipei
 5. The Entrance of Yuan Shan Scenic Spot
 6. Pei An Park
 7. Jian Tan Park
 8. Parking Lot
- ⇐ Path to MRT Jiantan station

Transportation: From Taiwan Taoyuan International Airport to the Grand Hotel

(1) CitiAir Bus

- ☆ Cost: full fare is NT\$90 per person each way.
- ☆ Purchase: please make reservation at the concierge in the lobby 60 minutes prior to departure. The service line of the center is: +886-2-2886-1818 ext. 1810. Please be punctual; the bus will not wait for belated passengers.
- ☆ Travel time: It takes 60 to 80 minutes to travel from the Grand Hotel to the Taiwan Taoyuan International Airport.
- ☆ Ticketing: Tickets sold at bus counters.

Terminal 1 bus pickup point: Bus pickup zone at B1 Arrivals.

Terminal 2 bus pickup point: Bus pickup zone at the northeast arcade of the 1st floor Arrivals lobby.

TEL : 0800-088-626

CitiAir Bus Schedule for Airport Shuttle Service (Taiwan Taoyuan International Airport)

From Hotel			From Terminal 1	From Terminal 2
05:10	10:20	15:20	06:00~01:00 The service is available every 20 to 30 minutes.	05:55~24:55 The service is available every 20 to 30 minutes.
06:10	11:20	16:20		
07:20	12:20	17:20		
08:20	13:20	18:20		
09:20	14:20	19:20		

(2) Taxi

A typical taxi fare from Taoyuan airport to Taipei is around NT\$1,100. The taxi fare is based on the meter plus a 15% surcharge and highway tolls.

(3) High Speed Railway (HSR)

Take the HSR from Taoyuan station to Taipei station. Then, take the Mass Rapid Transit (MRT) from Taipei station to Yuanshan, Dazhi, or Jiantan stations. The Grand Hotel offers free shuttle service between the hotel and the MRT stations.

i. From Yuanshan station to The Grand Hotel

In front of Exit 1 of MRT Yuanshan Station on the Tamsui Line located on Yumen Street, alongside other public bus stops.

The Grand Hotel --> MRT Yuanshan Station					
06:30	09:30	12:20	15:20	17:40	20:00
07:00	10:00	12:40	15:40	18:00	20:20
07:30	10:30	13:00	16:00	18:20	20:40
08:00	11:00	13:30	16:20	18:40	21:00
08:20	11:20	14:00	16:40	19:00	21:20
08:40	11:40	14:30	17:00	19:20	21:40
09:00	12:00	15:00	17:20	19:40	22:00
MRT Yuanshan Station --> The Grand Hotel					
06:40	09:40	12:30	15:30	17:50	20:10
07:10	10:10	12:50	15:50	18:10	20:30
07:40	10:40	13:10	16:10	18:30	20:50
08:10	11:10	13:40	16:30	18:50	21:10
08:30	11:30	14:10	16:50	19:10	21:30
08:50	11:50	14:40	17:10	19:30	21:50
09:10	12:10	15:10	17:30	19:50	22:10

ii. From Dazhi Station to The Grand Hotel

In front of Exit 3 of MRT Dazhi Station on the Neihu Line, alongside other public bus stops.

The Grand Hotel --> MRT Dazhi Station				
10:45	12:15	14:15	17:00	21:15
11:15	13:00	15:00	18:00	
11:45	13:45	16:00	19:45	
MRT Dazhi Station --> The Grand Hotel				
11:00	12:30	14:30	17:30	21:30
11:30	13:30	15:30	18:30	
12:00	14:00	16:30	20:00	

iii.From Jiantan station to The Grand Hotel

Near Exit 1 of MRT Jiantan Station on the Tamsui Line located on Zhongshan N. Road, alongside other public bus stops.

The Grand Hotel --> MRT Jiantan Station		
19:00	20:30	22:00
MRT Jiantan Station --> The Grand Hotel		
19:30	21:00	22:30

Pharmacy and Hospital



- 1.(Pharmacy)
No.36, Tonghe St., Shilin Dist.,
Taipei City
Tel:+886-228852188
- 2.(Pharmacy)
No.17, Ln. 40, Sec. 4, Chengde Rd.,
Shilin Dist., Taipei City
Tel:+886-228857588
- 3.(Pharmacy)
No.42-1, Tonghe St., Shilin Dist.,
Taipei City
Tel:+886-228851570
- 4.Shin Kong Wu Ho-Su Memorial
Hospital,
No. 95, Wen Chang Road, Shih Lin
District, Taipei City
Tel:+886-228332211

Optional Tours

ISMIR offers a great travel deal for your leisure time during the stay in Taiwan. Every foreign ISMIR registrant (not including the participant from Taiwan) will get a "USDS\$ 40 TOUR VOUCHER" to join some fabulous Taipei day tours! Plan your travel now by visiting the link below.

http://www.mytaiwantour.com/events_content.php?&Page=0&EventID=9

REGISTRATION

The registration desk will open on Monday, Oct 27th at 9:00 AM and then during program hours. Staff will be available throughout the conference at the registration desk. All participants are invited to collect meeting kit, name badge etc. at this desk. All attendees must wear the name badge all times throughout the conference. Each attendee will be receiving tickets to all events that should be kept in the name badge and presented to conference staff upon request. Participants' accounts may be balanced and pending payments, if any, may be settled at registration desk.

Fees

Regular and Student registrations to the conference include:

- Your individual 2014-2015 ISMIR membership fee (i.e. USD 10)
- Attendance to all paper sessions, posters, invited speeches between Oct 28th-31st
- Attendance to the concert
- Mid-morning and mid-afternoon coffee breaks between Oct 28th-30th
- Mid-morning coffee break on Oct 31st
- 3 tickets for lunch between Oct 28th-30th
- 1 ticket for the conference banquet on Oct 30th

- 1 ticket for the reception on Oct 27th
- A quality backpack of ISMIR-2014
- An electronic version of the conference proceedings
- A Polo shirt (Size can be selected at registration)
- Among other things...

Tutorial registration

- The price indicated below is for attendance to 1 single tutorial (either morning or afternoon) on Oct 27th
- Attendance to 1 tutorial in the morning and 1 in the afternoon is possible, for twice the price indicated below.
- People attending both morning and afternoon tutorials will have the meal of Oct 27th included.

Prices

Registration fee is in NTD. USD amounts shown below are calculated based on USD 1 = NTD 30 and are for reference only.

in USD		
	Regular (See Note 1)	Student (See Note 2)
Early Registration (Until July 25)	550	400
Regular Registration	650	500
Late (After Sep. 30) & On-Site Registration	700	550
Tutorial (Per half-day tutorial)	50	30
Poster Printing Service (Email your PDF file to us no later than Oct 20th) (See Note 3)	20	
Additional Welcome Reception Ticket	40	
Additional Banquet Ticket	80	

Note 1: At least one author must be registered for the conference (it can be at student rate if the author is a student) and that one author registration can cover at most two submissions (given that the one who registered is an author of both papers).

Note 2: You must provide proof of your student status to get the student discount. Please send it to ismir2014-registration@ismir.net (post-doc are not eligible for student rates).

Note 3: ISMIR2014 provides poster printing service. Please use the poster template provided by the conference to prepare your poster.

Note 4: After registration, people still have an option to print posters, buy additional tickets, or select more tutorials.

Cancellation Policy

You may cancel your registration by writing to ismir2014-registration@ismir.net. In order to receive a refund, the request for cancellation must be received by ISMIR2014 Registration Chair on or before 30 September 2014, with a processing fee of USD 50. If your cancellation request is received after 30 September 2014, no refund is given.

Registration and Help Desk

The registration and help desk will open over the periods below.

Mon, Oct 27th 09:00-20:00

Tue, Oct 28th 08:00-18:00

Wed, Oct 29th 08:00-18:00

Thu, Oct 30th 08:30-18:00

Fri, Oct 31st 08:30-12:00

SOCIAL PROGRAM

Welcome Reception

Monday October 27th, 18:00-20:00

Meet your colleagues and socialize with your friends during the get-together to be held at Song Ying Room on the 1st floor (lobby).

Warm food and soft drink will be served. Seagull-K Vocal Band will perform light music from 19:00-20:00.

Introducing the Performers

Seagull-K Vocal Band is a young active a cappella group in Taiwan specialized in both original and covering popular songs. In Mandarin, “Seagull-K” (Hai3-Ou1-K) has a similar pronunciation to Hai2-Ou1-K, which means “it's alright”. So, the group aims not merely to perform music, but also to keep a positive attitude in life.

Since established in 2009 at National Tsing-Hua University, Hsinchu, Taiwan, Seagull-K has openly performed for more than 100 times to promote and share the joy of a cappella music.

Seagull-K Vocal Band has won the 1st prize, best vocal and best rearrangement in the 5th Chuncheon Asia Youth A Cappella Competition in 2011, the 1st prize in 2011 Hong Kong A cappella Contest, and the 3rd prize in 2014 Incheon World A Cappella Competition.

Women in MIR meeting

Wednesday October 29th, 08:00-09:00

Join us at Song Bo Room for connecting with other female researchers and discussing issues related to women in MIR. Men are welcome too!

Mixer

Wednesday October 29th, 17:10-18:00

This year's ISMIR will also feature a conference mixer! It will be held on Wednesday, Oct 29th from 5:10-6:00PM at the Poster room (Song Bo Room) of the conference hotel. Similar in spirit to other speed networking events, the goal is to help those new to community meet and mingle with more established members of the group; so if this is your first ISMIR, this is definitely for you!

Music Hack Day:

Hacking Audio and Music Research

Saturday, Sunday October 25th-26th, Location: Academia Sinica, Taipei

HAMR@ISMIR 2014 will provide a space for individuals from various institutions, backgrounds, and experience levels to test out novel ideas as opposed to finishing a polished project and paper. As the name suggests, this iteration of HAMR is being held in conjunction with the ISMIR Conference, in hopes of fostering intercollegiate collaborations between conference attendees! HAMR@ISMIR2014 will be held at Academia Sinica (not at the conference hotel) immediately before ISMIR on Oct 25th-26th, 2014. For more information, please visit http://labrosa.ee.columbia.edu/hamr_ismir2014/ for more information.

Banquet

Thursday October 30th, 18:30-21:00

1. Traditional Taiwanese Aboriginal Music (20-min.)

Conductor: Han-Ju Chang

Principal: Zhi-Ming Chen

A Cappella Youth Choir: The Unique Atayal College (UAC)

The Unique Atayal College (UAC) Youth Choir was funded in 2008 in Hsinchu county for aboriginal young people, to provide a “Ngasal” (home) for the modern young people to promote their own spirit. In addition to lots of performances in Taiwan , 2011-2012 UAC Youth Choir successfully performed in Italy, Beijing, etc. in several cultural exchange activities.

“There is the Vienna Boys' Choir internationally, and we also have our aboriginal Vienna Choir in Taiwan” said Xie, Shi-Hong, the president of UAC, excitedly. The UAC youth choir and aboriginal teacher’s choir attended the Eight International Johannes Brahms Choir Competition & Festival in Wernigerode, Germany in July 2013 and won 3 silver medals. By flourishing aboriginal music via UAC internationally so that the world hears it, it is the glory of Taiwan!

Program : Taiwanese Aboriginal A Cappella Choir Pieces

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

Erhu: Pei-Yu Liao

Pipa: Yi-Chun Cheng

Bamboo Flute: Chia-You Chen

Yangqin: Tzu-Yu Wu

Ruan: Yi-Shan Chen

Founded in 2010 by Erhu performer Pei-Yu Liao, these excellent young girls who award lots of Chinese music competition prizes in Taiwan, perform lots of concerts domestically and internationally every year. In addition 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 in the opening performance in Character Art Festival Taipei City (2012). In 2013, they cooperated with Body Expression Dance Theater (BodyEDT), and 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. Flight Of the Bumblebee
3. Autumn Moon over the Calm Lake (Guangdong Gaohu)
4. Melody of Qinqiang Opera (Banhu)
5. The Spring (Jinghu)

CONFERENCE SCHEDULE

Day 1 (Monday, 27th)	Day 2 (Tuesday, 28th)	Day 3 (Wednesday, 29th)	Day 4 (Thursday, 30th)	Day 5 (Friday, 31st)
10:00-13:00 Tutorials 1/2 Chang Chin Room / Song Bo Room	9:00-10:20 Oral Session (OS1) Auditorium	9:00-10:20 Oral Session (OS4) Auditorium	9:00-10:20 Oral Session (OS7) Auditorium	9:00-9:40 MIREX session (oral) Auditorium
13:00-14:30 Lunch Yuan-Yuan Restaurant	10:20-12:00 Poster Session (PS1) Song Bo Room	10:20-12:00 Poster Session (PS2) Song Bo Room	10:20-12:00 Poster Session (PS3) Song Bo Room	9:40-10:20 MIREX session (grand challenge) Auditorium
14:30-17:30 Tutorials 3/4 Chang Chin Room / Song Bo Room	12:00-13:30 Lunch Grand Garden Restaurant	12:00-13:30 Lunch Golden Dragon Restaurant	12:00-13:30 Lunch Yuan Shan Club of Taipei	10:20-11:40 MIREX session (poster) Song Bo Room
	13:30-14:30 Keynote Speech 1 Auditorium	13:30-14:30 Keynote Speech 2 Auditorium	13:30-14:30 Industrial Panel Auditorium	11:40-12:40 Business Meeting Auditorium
	14:30-15:30 Oral Session (OS2) Auditorium	14:30-15:30 Oral Session (OS5) Auditorium	14:30-15:30 Oral Session (OS8) Auditorium	12:40-13:00 Closing Auditorium
	15:30-16:30 Poster Session (PS1) Song Bo Room	15:30-16:30 Poster Session (PS2) Song Bo Room	15:30-16:30 Poster Session (PS3) Song Bo Room	13:00-14:00 Lunch on your own
	16:30-18:10 Oral Session (OS3) Auditorium	16:30-17:10 Oral Session (OS6) Auditorium	16:30-17:50 Oral Session (OS9) Auditorium	14:00-15:30 Late-breaking and Demo Session Song Bo Room, Chang Chin Room
18:00-20:00 Reception Song Ying Room (1F)		17:10-18:00 Mixer Song Bo Room		15:30-18:00 Unconference Auditorium, Song Bo Room, Chang Chin Room, The Grand VIP Room
		19:00-22:00 Concert Auditorium	18:30-21:00 Banquet Kunlun Hall (12F)	

Keynote Speeches

Keynote 1: Automatic Music Transcription:

From music signals to music scores

Axel Roebel (Analysis/Synthesis team, IRCAM)



Abstract

Deriving the symbolic annotation of a piece of music from the audio signal is one of the important long term objectives of research in music information retrieval. The related signal processing task is denoted in short as: Automatic Music Transcription. It consists of deriving a complete score including the timing and frequency information of the notes (instruments and drums) present, and the instruments that have produced each note. A solution of this task would have an important impact on the research on MIR because it would open the door to use a symbolic music representation for the analysis of arbitrary audio signals. On the other hand one may note that the solution of the AMT task may benefit from results of many individual MIR tasks: e.g. tonality, chords, tempo, structure (notably repetitions), instrumentation.

The present talk aims to situate today's research related to the AMT problem. It will start with an introduction into the problem and the main obstacles to be resolved. Then a brief summary of the history of research related to Automatic Music Transcription will be presented leading to a description of the state of the art. An overview of the algorithms that are currently employed will be given together with a few examples using existing software implementations. Finally, potential directions for improving the state of the art AMT algorithms will be discussed covering instrument models (ANR project SOR2), multi channel audio analysis (EU FP7 project 3DTVS), as well as music theoretic constraints.

Biography

Axel Roebel is the head of the research team analysis/synthesis of sound at IRCAM. He received the Diploma in electrical engineering from Hannover University in 1990 and the Ph.D. degree (summa cum laude) in computer science from the Technical University of Berlin in 1993. In 1994 he joined the German National Research Centre for Information Technology (GMD-First) in Berlin where he continued his research on adaptive modelling of time series of nonlinear dynamical systems. In 1996 he became assistant professor for digital signal processing in the communication science department of the Technical University of Berlin. Since 2000 he is working at IRCAM doing research on spectral domain algorithms for sound analysis, synthesis and transformation. In summer 2006 he was Edgar-Varese guest professor for computer music at the Electronic studio of the Technical University of Berlin and in 2011 he became the head of the analysis/synthesis team.

His research centres around problems in audio signal analysis, synthesis and transformation covering music and speech. His recent research projects are related to spectral modelling of musical instruments (ANR project Sample Orchestrator II), audio to midi transcription (industrially funded project Audio2Note), detection and classification of sound events in multi channel audio (EU FP7 project 3DTV5), modelling and transformation of sound textures (ANR project PHYSIS), synthesis of singing voice (ANR project CHANTER). He is the main author of IRCAM's SuperVP software library for sound analysis and transformation.

Keynote 2: Sound and Music Computing for Exercise and (Re-)habilitation

Ye Wang (Sound and Music Computing Lab,
National University of Singapore)



Abstract

The use of music as an aid in healing body and mind has received enormous attention over the last 20 years from a wide range of disciplines, including neuroscience, physical therapy, exercise science, and psychological medicine. We have attempted to transform insights gained from the scientific study of music and medicine into real-life applications that can be delivered widely, effectively, and accurately. We have been trying to use music in evidence-based and/or preventative medicine. In this talk, I will describe three clinically-focused tools to facilitate the delivery of established music-enhanced therapies, harnessing the synergy of sound and music computing (SMC), mobile computing, and cloud computing technologies to promote healthy lifestyles and to facilitate disease prevention, diagnosis, and treatment in both developed countries and resource-poor developing countries. I will present some of our past and ongoing research projects that combine wearable sensors, smartphone apps, and a cloud-based therapy delivery system to facilitate music-enhanced physical and speech therapy, as well as the joys and pains working in such a multidisciplinary environment.

Biography

Ye Wang is an Associate Professor in the Computer Science Department at the National University of Singapore (NUS) and NUS Graduate School for Integrative Sciences and Engineering (NGS). He established and directed the sound and music computing (SMC) Lab (www.smcnus.org). Before joining NUS he was a member of the technical staff at Nokia Research Center in Tampere, Finland for 9 years. His research interests include sound analysis

and music information retrieval (MIR), mobile computing, and cloud computing, and their applications in music edutainment and e-Health, as well as determining their effectiveness via subjective and objective evaluations. His most recent projects involve the design and evaluation of systems to support 1) therapeutic gait training using Rhythmic Auditory Stimulation (RAS), and 2) Melodic Intonation Therapy (MIT). He is also affiliated with the School of Computer Science of Fudan University and Harvard Medical School.

Tutorials

Morning Tutorials

Tutorial 1: "Why is Greek music interesting? Towards an ethics of MIR"

by Andre Holzapfel and George Tzanetakis

Location: Chang Chin Room (10F)

The initial goal of this tutorial is to provide an overview of musical styles in Greek culture, and to indicate various features of these musics that make them challenging and interesting for research in Music Information Retrieval (MIR). This tutorial is addressed to everybody interested in extending the diversity of her/his evaluation data, this way targeting generality of MIR approaches. On the other hand, the tutorial is aimed to provide a lively overview over a range of styles, that we hope will be informative and inspiring for any music listener. The tutorial will initially provide an overview of various styles of rural and urban music styles in the various areas of Greece. Then, we will focus on some styles we are particularly familiar with, and point out a variety of research tasks that is apparently quite challenging for those musics, such as beat tracking, mood estimation, transcription and chord estimation. In conclusion, inspired by the diversity of Greek music and the problems such diversity poses for our

research, we will reflect on the possibility of universal approaches to music processing, and discuss ethical implications for our work on recommendation systems for the musics of the world.

Tutorial 2:"Musical structure analysis"

by Meinard Mueller and Jordan Smith

Location: Song Bo Room (10F)

One of the attributes distinguishing music from other sound sources is the hierarchical structure in which music is organized. On the lowest level, one may have sound events such as individual notes, which are characterized by the way they sound, their timbre, pitch and duration. Such sound events combine to form larger structures such as motives, phrases, and chords, and these elements again form larger constructs that determine the overall layout of the composition. This higher structural level is specified in terms of musical parts and their mutual relations. For example, in popular music such parts can be the intro, chorus, and verse sections of the song. Or, in classical music, it can be the exposition, development, and recapitulation of a sonata movement. The goal of music structure analysis is to divide a given music representation into temporal segments that correspond to musical parts and to group these segments into musically meaningful categories.

In this tutorial, we review the most important segmentation and structure analysis principles and then discuss state-of-the-art techniques—many published in just the last few years—that exploit specific characteristics of music. The goals of this tutorial are: first, to explicitly discuss the simplifying model assumptions that each computational procedure is based on; second, to present recent research directions within music structure analysis and to show how the various principles can be applied and combined; and third, to discuss problems involving the evaluation of

automated procedures and the use of so-called "ground-truth" reference annotations.

Afternoon Tutorials

Tutorial 3: "Jingju music: concepts and computational tools for its analysis"

by Rafael Caro Repetto, Ajay Srinivasamurthy, Sankalp Gulati and Xavier Serra

Location: Chang Chin Room (10F)

Jingju (also known as Peking or Beijing opera) is one of the most representative genres of Chinese traditional music. From an MIR perspective, jingju music offers interesting research topics that challenge current MIR tools. The singing/acting characters in jingju are classified into predefined role-type categories with characteristic singing styles. Their singing is accompanied by a small instrumental ensemble, within which a high pitched fiddle, the jinghu, is the most prominent instrument within the characteristic heterophonic texture. The melodic conventions that form jingju modal systems, known as shengqiang, and the percussion patterns that signal important structural points in the performance offer interesting research questions. Also the overall rhythmic organization into pre-defined metrical patterns known as banshi makes tempo tracking and rhythmic analysis a challenging problem. Being Chinese a tonal language, the intelligibility of the text would require the expression of tonal categories in the melody, what offers an appealing scenario for the research of lyrics-melody relationship. The role of the performer as a core agent of the music creativity gives jingju music a notable space for improvisation. The lyrics and scores cannot be taken as authoritative sources, but as transcriptions of particular performances.

In this tutorial we will give an overview of Jingju music, of the relevant problems that can be studied from an MIR perspective and of the use of specific computational tools for its analysis. The tutorial will be organized in three parts. The first will be an introduction to Jingju from a musicological perspective, the second will cover diverse audio analysis tools of relevance to the study of Jingju (using <http://essentia.upf.edu>), and finally in the last part we will present and discuss specific examples of analyzing Jingju arias using those tools (work done in the context of <http://compmusic.upf.edu>).

Tutorial 4: "MiningSuite, a comprehensive framework for music analysis, articulating audio (MIRtoolbox 2.0) and symbolic approaches"

by Olivier Lartillot

Location: Song Bo Room (10F)

This tutorial presents an in-depth introduction to MiningSuite, a continuation of MIRtoolbox, an innovative environment featuring a large range of audio and music analysis tools. Thanks to an adaptive syntactic layer on top of Matlab, complex design of audio or music analysis operations can be written in a very concise way through a simple assemblage of operators featuring a large set of options. The integration of expertise developed in separate areas of study into common modules encourages further reuse of these individual methods and their intermingling into a common framework. The MiningSuite features an innovative and integrative set of symbolic-based musicological tools related to, among others, segmentation in the form of hierarchical grouping, melodic reduction and modal analysis. An innovative method for exhaustive pattern mining allows detailed motivic and metrical analyses. Audio and symbolic representations (in MIDI and score-like formats) and processes are tightly interconnected: Operators dedicated to high-level musical features extraction (tonal, metrical, structural analyses) integrate

signal processing, statistical and symbolic-based methods, and accept both symbolic and audio input.

The tutorial, suitable for both novices and experts, will give an overview of these different audio and symbolic approaches available in the framework, and will explain how to take benefit of the capabilities of the environment via the user-friendly syntax. At the last part of the tutorial, we will dwell a little into the description of the architecture of the MiningSuite (significantly different from the previous MIRtoolbox project) and of the core classes that govern the general capabilities of the framework. Will be described for instance the rich format of the output results, or a syntactic layer within the operators' Matlab code that simplifies and clarifies the code while taking care of the matrix optimisations in the background. We will explain how you can write new modules, and will present the open-source collaborative platform hosting the MiningSuite project, with versioning control, integrated source code browsing and code review, issue tracker and user's manual available in a wiki environment.

Conference Program

Monday October 27th, 2014

10:00 AM - 01:00 PM Tutorials 1 & 2 [Chang Chin Room / Song Bo Room]

01:00 AM - 02:30 PM Lunch [Yuan-Yuan Restaurant]

Only for people who register for both the morning and afternoon tutorials

02:30 AM - 05:30 PM Tutorial 3 & 4 [Chang Chin Room / Song Bo Room]

06:00 PM - 08:00 PM Reception [Song Ying Room (1F)]

Tuesday October 28th, 2014

08:40 AM - 09:00 AM Opening [Auditorium]

09:00 AM - 10:20 AM Oral Session 1: Classification (OS1) [Auditorium]

Chair: George Tzanetakis

(OS1-1) On Cultural, Textual and Experiential Aspects of Music Mood

AbhishekSinghi and Daniel Brown

University of Waterloo

(OS1-2) Sparse Cepstral and Phase Codes for Guitar Playing Technique Classification

Li Su, Li Fan Yu, Yi-Hsuan Yang

Research Center for Information Technology Innovation, Academia Sinica

(OS1-3) Automated Detection of Single- and Multi-Note Ornaments in Irish Traditional Flute Playing

Munevver Kokuer¹, Peter Jancovic², Islah Ali-MacLachlan¹, Cham Athwal¹

¹Birmingham City University, ²University of Birmingham

(OS1-4) The Kiki-Bouba Challenge: Algorithmic composition for content-based MIR Research & Development

Bob Sturm¹ and Nick Collins²

¹Aalborg University Copenhagen, ²Durham University

10:20 AM - 12:00 PM & 03:30 PM - 04:30 PM Poster Session 1 (PS1) [Song Bo Room]

Chair: Zhiyao Duan

(PS1-1) Transfer Learning by Supervised Pre-training for Audio-based Music Classification

Aäron van den Oord, Sander Dieleman, Benjamin Schrauwen

Ghent University

(PS1-2) Estimating Musical Time Information from Performed MIDI Files

Harald Grohganz¹, Michael Clausen¹, Meinard Mueller²

¹University of Bonn, ²International Audio Laboratories Erlangen

(PS1-3) Estimation of the Direction of Strokes and Arpeggios

Isabel Barbancho¹, George Tzanetakis², Lorenzo J. Tardon¹, Peter F. Driessen², Ana M. Barbancho¹

¹Universidad de Malaga, Andalucia Tech, ATIC Research

Group, ETSI Telecomunicacion, Campus de Teatinos s/n, 29071 Malaga, SPAIN,

²University of Victoria. Department of Computer Science. Victoria, CANADA

(PS1-4) Predicting Expressive Dynamics in Piano Performances using Neural Networks

Sam van Herwaarden¹, Maarten Grachten², W. Bas de Haas³

¹Austrian Research Institute for AI (OFAI), ²Austrian Research Institute for AI,

³Utrecht University

(PS1-5) An RNN-based Music Language Model for Improving Automatic Music Transcription

Siddharth Sigtia¹, Emmanouil Benetos², Srikanth Cherla², Tillman Weyde², Artur S. d'Avila Garcez², Simon Dixon¹

¹Queen Mary University of London, ²City University London

(PS1-6) Towards Modeling Texture in Symbolic Data

Mathieu Giraud¹, Florence Levé², Florent Mercier¹, Marc Rigaudière³, Donatien Thorez¹

¹LIFL, ²MIS, LIFL, ³Université de Lorraine

(PS1-7) Computational Models for Perceived Melodic Similarity in A Cappella Flamenco Singing

Nadine Kroher¹, Emilia Gómez¹, Catherine Guastavino², Francisco Gómez-Martín³, Jordi Bonada⁴

¹Music Technology Group, Universitat Pompeu Fabra, ²Centre for Interdisciplinary Research in Music Media & Technology, McGill University,

³School of Computer Science, Polytechnic University of Madrid, ⁴Music Technology Group, Universitat Pompeu Fabra

(PS1-8) The VIS Framework: Analyzing Counterpoint in Large Datasets

Christopher Antila and Julie Cumming

McGill University

(PS1-9) Hierarchical Approach to Detect Common Mistakes of Beginner Flute PlayerS

Yoonchang Han and Kyogu Lee

Seoul National University

(PS1-10) Robust Joint Alignment of Multiple Versions of a Piece of Music

Siying Wang, Sebastian Ewert, Simon Dixon

Queen Mary University of London

(PS1-11) Formalizing the Problem of Music Description

Bob Sturm¹, Rolf Bardeli², Thibault Langlois³, Valentin Emiya⁴

¹Aalborg University Copenhagen, ²Fraunhofer, ^{3,4}Aix-Marseille University

(PS1-12) An Association-based Approach to Genre Classification in Music.

Tom Arjannikov and John Z. Zhang

Department of Mathematics and Computer Science, University of Lethbridge

(PS1-13) Multiple Viewpoint Melodic Prediction with Fixed-Context Neural Networks

SrikanthCherla, Tillman Weyde, Arturd'AvilaGarcez

City University London

(PS1-14) Verovio: A library for Engraving MEI Music Notation into SVG

Laurent Pugin¹, Rodolfo Zitellini¹, Perry Roland²

¹Swiss RISM Office, ²University of Virginia

(PS1-15) Music Classification by Transductive Learning Using Bipartite Heterogeneous Networks

Diego Furtado Silva, Rafael Geraldini Rossi, Solange Oliveira Rezende, Gustavo

Enrique de Almeida Prado Alves Batista

ICMC-USP

(PS1-16) Automatic Melody Transcription based on Chord Transcription

AnttiLaaksonen

University of Helsinki

(PS1-17) Audio-to-score Alignment at the Note Level for Orchestral Recordings

Marius Miron, Julio Jose Carabias-Orti, Jordi Janer

PompeuFabra University Barcelona

(PS1-18) A Compositional Hierarchical Model for Music Information Retrieval

Matevž Pesek¹, Aleš Leonardis², Matija Marolt¹

¹University of Ljubljana, Faculty of computer and information science,

²University of Birmingham, School of Computer Science

(PS1-19) An Analysis and Evaluation of Audio Features for Multitrack Music Mixtures

Brecht De Man¹, Brett Leonard², Richard King², Joshua D. Reiss¹

¹Centre for Digital Music, Queen Mary University of London, ²The Graduate Program in Sound Recording, Schulich School of Music, McGill University;

Centre for Interdisciplinary Research in Music Media and Technology

(PS1-20) Detecting Drops in Electronic Dance Music: Content based approaches to a socially significant music event

KarthikYadati, Martha Larson, Cynthia C. S. Liem, Alan Hanjalic

Delft University of Technology

(PS1-21) Towards Automatic Content-Based Separation of DJ Mixes into Single Tracks

NikolayGlazyrin

Ural Federal University

(PS1-22) MedleyDB: A Multitrack Dataset for Annotation-Intensive MIR Research

Rachel M. Bittner¹, Justin Salamon¹, Mike Tierney¹, Matthias Mauch², Chris Cannam², Juan P. Bello¹

¹New York University, ²Queen Mary University

(PS1-23) Melody Extraction from Polyphonic Audio of Western Opera: A Method based on Detection of the Singer's Formant

Zheng Tang¹ and Dawn A. A. Black²

¹University of Washington, Department of Electrical Engineering, ²Queen Mary University of London, Electronic Engineering and Computer Science

(PS1-24) Codebook-based Scalable Music Tagging with Poisson Matrix Factorization

Dawen Liang, John Paisley, Dan Ellis

Columbia University

01:30 PM - 02:30 PM Keynote Speech 1: Axel Roebel (Automatic Music Transcription: From Music Signals to Music Scores) [Auditorium]

Chair: Li Su

02:30 PM - 03:30 PM Oral Session 2: Transcription (OS2) [Auditorium]

Chair: Emilia Gomez

(OS2-1) Template Adaptation for Improving Automatic Music Transcription

Emmanouil Benetos¹, Roland Badeau², Tillman Weyde¹, Gaël Richard²

¹City University London, ²Télécom ParisTech

(OS2-2) Note-level Music Transcription by Maximum Likelihood Sampling

Zhiyao Duan and David Temperley

University of Rochester

(OS2-3) Drum Transcription via Classification of Bar-Level Rhythmic Patterns

Lucas Thompson, Simon Dixon, Matthias Mauch

Queen Mary University of London

04:30 PM - 06:10 PM Oral Session 3: Symbolic (OS3) [Auditorium]

Chair: Frans Wiering

(OS3-1) Developing Tonal Perception through Unsupervised Learning

Carlos Eduardo CancinoChacón, Stefan Lattner, Maarten Grachten

Austrian Research Institute for Artificial Intelligence

(OS3-2) Exploiting Instrument-wise Playing/Non-Playing Labels for Score Synchronization of Symphonic Music

AlessioBazzica, Cynthia C. S. Liem, Alan Hanjalic

Delft University of Technology

(OS3-3) Multi-Strategy Segmentation of Melodies

Marcelo Rodríguez-López, Anja Volk, Dimitrios Bountouridis

Utrecht University

(OS3-4) A Data Set for Computational Studies of Schenkerian Analysis

Phillip Kirlin

Rhodes College

(OS3-5) Systematic Multi-scale Set-class Analysis

Agustín Martorell and Emilia Gómez

Universitat Pompeu Fabra

Wednesday October 29th, 2014

08:00 AM - 09:00 AM Women in MIR meeting [Song Bo Room]

Chair: Jin Ha Lee

09:00 AM - 10:20 AM Oral Session 4: Retrieval (OS4) [Auditorium]

Chair: Hirokazu Kameoka

(OS4-1) Spotting a Query Phrase from Polyphonic Music Audio Signals
Based on Semi-supervised Nonnegative Matrix Factorization

Taro Masuda¹, Kazuyoshi Yoshii², Masataka Goto³, Shigeo Morishima¹

¹Waseda University, ²Kyoto University, ³National Institute of Advanced
Industrial Science and Technology (AIST)

(OS4-2) Bayesian Audio Alignment based on a Unified Model of Music
Composition and Performance

Akira Maezawa¹, Katsutoshi Itoyama², Kazuyoshi Yoshii², Hiroshi Okuno³

¹Kyoto University; Yamaha Corporation, ²Kyoto University, ³Waseda University

(OS4-3) Automatic Set List Identification and Song Segmentation for
Full-Length Concert Videos

Ju-Chiang Wang¹, Ming-Chi Yen², Yi-Hsuan Yang², Hsin-Min Wang²

¹UCSD, ²Academia Sinica

(OS4-4) On Inter-rater Agreement in Audio Music Similarity

Arthur Flexer

Austrian Research Institute for Artificial Intelligence

10:20 AM - 12:00 PM & 03:30 PM - 04:30 PM Poster Session 2 (PS2)

[Song Bo Room]

Chair: Matthias Mauch

(PS2-1) Emotional Predisposition of Musical Instrument Timbres with Static Spectra

Bin Wu¹, Andrew Horner¹, Chung Lee²

¹HKUST, ²SUTD

(PS2-2) Panako - A Scalable Acoustic Fingerprinting System Handling Time-Scale and Pitch Modification

Joren Six and Marc Leman

Institute for Psychoacoustics and Electronic Music (IPEM), Department of Musicology, Ghent University, Ghent, Belgium

(PS2-3) Perceptual Analysis of the F-Measure to Evaluate Section Boundaries in Music

Oriol Nieto¹, Morwaread Farbood¹, Tristan Jehan², Juan Pablo Bello¹

¹New York University, ²The Echo Nest

(PS2-4) Keyword Spotting in A-capella Singing

Anna Kruspe

Fraunhofer IDMT

(PS2-5) The Importance of F0 Tracking in Query-by-singing-humming

Emilio Molina, Lorenzo J. Tardón, Isabel Barbancho, Ana M. Barbancho

Universidad de Málaga

(PS2-6) Vocal Separation using Singer-Vowel Priors Obtained from Polyphonic Audio

Shrikant Venkataramani¹, Nagesh Nayak², Preeti Rao¹, Rajbabu Velmurugan¹

¹Indian Institute of Technology Bombay, ²SensiBol Audio Technologies Pvt. Ltd.

(PS2-7) Improving Query by Tapping via Tempo Alignment

Chun-Ta Chen¹, Jyh-Shing Roger Jang², Chun-Hung Lu³

¹cs nthu, ²cs ntu, ³Innovative Dignitech-Enabled Applications & Services Institute (IDEAS), Institute for Information Industry, Taiwan

(PS2-8) Automatic Instrument Classification of Ethnomusicological Audio Recordings

Dominique Fourer, Jean-Luc Rouas, Pierre Hanna, Matthias Robine

LaBRI, University of Bordeaux

(PS2-9) Music Analysis as a Smallest Grammar Problem

Kirill Sidorov, Andrew Jones, David Marshall

Cardiff University

(PS2-10) Frame-Level Audio Segmentation for Abridged Musical Works

Thomas Praetlich and Meinard Mueller

International Audio Laboratories Erlangen

(PS2-11) Creating a Corpus of Jingju (Beijing Opera) Music and Possibilities for Melodic Analysis

Rafael Caro Repetto and Xavier Serra

Music Technology Group, Universitat Pompeu Fabra, Barcelona

(PS2-12) Modeling Temporal Structure in Music for Emotion Prediction using Pairwise Comparisons

Jens Madsen, Bjørn Sand Jensen, Jan Larsen

Technical University of Denmark

(PS2-13) Musical Structural Analysis Database Based on GTTM

Masatoshi Hamanaka¹, Keiji Hirata², Satoshi Tojo³

¹Kyoto University, ²Future University Hakodate, ³JAIST

(PS2-14) Theoretical Framework of A Computational Model of Auditory Memory for Music Emotion Recognition

Marcelo Caetano¹ and Frans Wiering²

¹INESC TEC, ²Utrecht University

(PS2-15) Improving Music Structure Segmentation using lag-priors

Geoffroy Peeters and Victor Bisot

STMS IRCAM-CNRS-UPMC

(PS2-16) Study of the Similarity between Linguistic Tones and Melodic Pitch Contours in Beijing Opera Singing

Shuo Zhang, Rafael Caro Repetto, Xavier Serra

Music Technology Group, University Pompeu Fabra

(PS2-17) A Proximity Grid Optimization Method to Improve Audio Search for Sound Design

Christian Frisson, Stéphane Dupont, Willy Yvart, Nicolas Riche, Xavier Siebert, Thierry Dutoit

University of Mons, numediart Institute

(PS2-18) Introducing a Dataset of Emotional and Color Responses to Music

Matevž Pesek¹, Primož Godec¹, Mojca Poredoš¹, Gregor Strle², Jože Guna¹, Emilija Stojmenova¹, Matevž Pogačnik¹, Matija Marolt¹

¹University of Ljubljana, ²Scientific Research Centre of the Slovenian Academy of Sciences and Arts

(PS2-19) In-depth Motivic Analysis based on Multiparametric Closed Pattern and Cyclic Sequence Mining

Olivier Lartillot

Aalborg University

(PS2-20) MIR_EVAL: A Transparent Implementation of Common MIR Metrics

Colin Raffel¹, Brian McFee¹, Eric J. Humphrey², Justin Salamon², Oriol Nieto², Dawen Liang², Daniel P. W. Ellis¹

¹Columbia University, ²New York University

(PS2-21) Computational Modeling of Induced Emotion Using GEMS

Anna Aljanaki, Frans Wiering, Remco C. Veltkamp

Utrecht University

(PS2-22) Cognition-inspired Descriptors for Scalable Cover Song Retrieval

Jan Van Balen, Dimitrios Bountouridis, Frans Wiering, Remco Veltkamp

Utrecht University

(PS2-23) A Cross-Cultural Study on the Mood of K-POP Songs

Xiao Hu¹, Jin Ha Lee², Kahyun Choi³, J. Stephen Downie³

¹University of Hong Kong, ²University of Washington, ³University of Illinois

(PS2-24) Cadence Detection in Western Traditional Stanzaic Songs using Melodic and Textual Features

Peter Van Kranenburg and Folger Karsdorp

Meertens Institute, Amsterdam

(PS2-25) Discovering Typical Motifs of a Raga from One-Liners of Songs in Carnatic Music

Shrey Dutta and Hema A Murthy

IIT Madras

01:30 PM - 02:30 PM Keynote Speech 2: Ye Wang (Sound and Music Computing for Exercise and (Re-)habilitation) [Auditorium]

Chair: Ju-Chiang Wang

02:30 PM - 03:30 PM Oral Session 5: Structure (OS5) [Auditorium]

Chair: Meinard Mueller

(OS5-1) Analyzing Song Structure with Spectral Clustering

Brian McFee and Dan Ellis

Columbia University

(OS5-2) Identifying Polyphonic Musical Patterns From Audio Recordings Using Music Segmentation Techniques

Oriol Nieto and Morwaread Farbood

New York University

(OS5-3) Boundary Detection in Music Structure Analysis using Convolutional Neural Networks

Karen Ullrich, Jan Schlüter, Thomas Grill

Austrian Research Institute for Artificial Intelligence (OFAI)

04:30 PM - 05:10 PM Oral Session 6: Cultures (OS6) [Auditorium]

Chair: Anja Volk

(OS6-1) Tracking the "Odd": Meter Inference in a Culturally Diverse Music Corpus

Andre Holzapfel¹, Florian Krebs², Ajay Srinivasamurthy³

¹New York University Abu Dhabi, ²Johannes Kepler University, ³Universität

Pompeu Fabra

(OS6-2) Transcription and Recognition of Syllable based Percussion Patterns: The Case of Beijing Opera

Ajay Srinivasamurthy¹, Rafael Caro Repetto¹, Harshavardhan Sundar², Xavier Serra¹

¹Universitat Pompeu Fabra, Barcelona, Spain, ²Indian Institute of Science, Bangalore, India

05:10 PM - 06:00 PM Mixer [Song Bo Room]

Chair: Eric Humphrey

07:00 PM - 10:00 PM Concert [Auditorium]

Chair: Jeff Huang

Thursday October 30th, 2014

09:00 AM - 10:20 AM Oral Session 7: Recommendation & Listeners (OS7) [Auditorium]

Chair: Markus Schedl

(OS7-1) Taste Space Versus the World: an Embedding Analysis of Listening Habits and Geography

Joshua Moore¹, Thorsten Joachims¹, Douglas Turnbull²

¹Cornell University, ²Ithaca College

(OS7-2) Enhancing Collaborative Filtering Music Recommendation by Balancing Exploration and Exploitation

Zhe Xing, Xinxi Wang, Ye Wang

School of Computing, National University of Singapore

(OS7-3) Improving Music Recommender Systems: What Can We Learn from Research on Music Tastes

Audrey Laplante

Université de Montréal

(OS7-4) Social Music in Cars

Sally Jo Cunningham, David M. Nichols, David Bainbridge, Hassan Ali

Waikato University

10:20 AM - 12:00 PM & 03:30 PM - 04:30 PM Poster Session 3 (PS3)
[Song Bo Room]

Chair: Audrey Laplante

(PS3-1) A Combined Thematic and Acoustic Approach for a Music Recommendation Service in TV Commercials

Mohamed Morchid, Richard Dufour, Georges Linares

LIA - University of Avignon

(PS3-2) Are Poetry and Lyrics All That Different

AbhishekSinghi and Daniel Brown

University of Waterloo

(PS3-3) Singing-Voice Separation from Monaural Recordings using Deep Recurrent Neural Networks

Po-Sen Huang, Minje Kim, Mark Hasegawa-Johnson, Paris Smaragdis

University of Illinois at Urbana-Champaign

(PS3-4) Impact of Listening Behavior on Music Recommendation

Katayoun Farrahi¹, Markus Schedl², Andreu Vall², David Hauger², Marko Tkalcic²

¹Goldsmiths, University of London, ²

(PS3-5) Towards Seamless Network Music Performance: Predicting an Ensemble's Expressive Decisions for Distributed Performance

Bogdan Vera and Elaine Chew

Queen Mary, University of London

(PS3-6) Detection of Motor Changes in Violin Playing by EMG Signals

Ling-Chi Hsu¹, Yu-Lin Wang¹, Yi-Ju Lin¹, Cheryl D. Metcalf², Alvin W.Y. Su¹

¹Department of CSIE, National Cheng-Kung University, Taiwan, ²Faculty of Health Sciences, University of Southampton, United Kingdom

(PS3-7) Automatic Key Partition Based on Tonal Organization Information of Classical Music

Wang Kong Lam and Tan Lee

The Chinese University of Hong Kong

(PS3-8) Bayesian Singing-Voice Separation

Po-Kai Yang, Chung-Chien Hsu, Jen-Tzung Chien

National Chiao Tung University

(PS3-9) Probabilistic Extraction of Beat Positions from a Beat Activation Function

Filip Korzeniowski, Sebastian Böck, Gerhard Widmer

Department of Computational Perception, Johannes Kepler University, Linz

(PS3-10) Geographical Region Mapping Scheme Based on Musical Preferences

Sanghoon Jun¹, Seungmin Rho², Eeunjun Hwang¹

¹Korea University, ²Sungkyul University

(PS3-11) On Comparative Statistics for Labelling Tasks: What can We Learn from MIREX ACE 2013

John Ashley Burgoyne¹, Bas de Haas², Johan Pauwels³

¹Universiteit van Amsterdam, ²Universiteit Utrecht, ³

(PS3-12) Merged-Output HMM for Piano Fingering of Both Hands

Eita Nakamura¹, Nobutaka Ono¹, Shigeki Sagayama²

¹National Institute of Informatics, ²Meiji University

(PS3-13) Modeling Rhythm Similarity for Electronic Dance Music

Maria Panteli¹, Niels Bogaards², Aline Honingh¹

¹Institute for Logic, Language and Computation, University of Amsterdam, P.O. Box 94242, 1090 GE Amsterdam, Netherlands, ²Elephantcandy, Rapenburg 91c, 1011 TW Amsterdam, Netherlands

(PS3-14) MuSe: A Music Recommendation Management System

Martin Przyjaciel-Zablocki, Thomas Hornung, Alexander Schätzle, Sven Gau, Io Taxidou, Georg Lausen

University of Freiburg

(PS3-15) Tempo- and Transposition-invariant Identification of Piece and Score Position

Andreas Arzt, Gerhard Widmer, Reinhard Sonnleitner

Johannes Kepler University

(PS3-16) Gender Identification and Age Estimation of Users Based on Music Metadata

Ming-Ju Wu¹, Jyh-Shing Jang², Chun-Hung Lu³

¹National Tsing Hua University, ²National Taiwan University, ³Innovative Digitech-Enabled Applications & Services Institute (IDEAS), Institute for Information Industry, Taiwan

(PS3-17) Information-Theoretic Measures of Music Listening Behaviour

Daniel Boland and Roderick Murray-Smith

School of Computing Science, University of Glasgow, United Kingdom

(PS3-18) Evaluation Framework for Automatic Singing Transcription

Emilio Molina, Ana M. Barbancho, Lorenzo J. Tardón, Isabel Barbancho

Universidad de Málaga

(PS3-19) What is the Effect of Audio Quality on the Robustness of MFCCs and Chroma Features

Julián Urbano, Dmitry Bogdanov, Perfecto Herrera, Emilia Gómez, Xavier Serra

Universitat Pompeu Fabra

(PS3-20) Music Information Behaviors and System Preferences of University Students in Hong Kong

Xiao Hu¹, Jin Ha Lee², Leanne Ka Yan Wong¹

¹University of Hong Kong, ²University of Washington

(PS3-21) LyricsRadar: A Lyrics Retrieval System Based on Latent Topics of Lyrics

Shoto Sasaki¹, Kazuyoshi Yoshii², Tomoyasu Nakano³, Masataka Goto³, Shigeo Morisihima¹

¹Waseda University, ²Kyoto University, ³National Institute of Advanced Industrial Science and Technology (AIST)

(PS3-22) JAMS: A JSON Annotated Music Specification for Reproducible MIR Research

Eric J. Humphrey, Justin Salamon, Oriol Nieto, Jon Forsyth, Rachel M. Bittner, Juan P. Bello

NYU

(PS3-23) On The Changing Regulations of Privacy and Personal Information in MIR

Pierre Saurel¹, Francis Rousseaux², Marc Danger³

¹Université Paris-Sorbonne, ²IRCAM, ³ADAMI

(PS3-24) A Multi-model Approach to Beat Tracking Considering Heterogeneous Music Styles

Sebastian Böck, Florian Krebs, Gerhard Widmer

Johannes Kepler University

01:30 PM - 02:30 PM Industrial Panel [Auditorium]

Chair: Brian Mcfee

02:30 PM - 03:30 PM Oral Session 8: Source Separation (OS8)

[Auditorium]

Chair: Kazuyoshi Yoshii

(OS8-1) Extending Harmonic-Percussive Separation of Audio Signals

Jonathan Driedger¹, Meinard Mueller¹, Sascha Disch²

¹International Audio Laboratories Erlangen, ²Fraunhofer Institute for Integrated Circuits IIS

(OS8-2) Singing Voice Separation Using Spectro-Temporal Modulation Features

Frederick Yen¹, Yin-Jyun Luo¹, Tai-Shih Chi²

¹Master Program of Sound And Music Innovative Technologies, ²Department of Electrical and Computer Engineering, National Chiao Tung University, Hsinchu, Taiwan 300, R.O.C.

(OS8-3) Harmonic-Temporal Factor Decomposition Incorporating Music Prior Information for Informed Monaural Source Separation

Tomohiko Nakamura¹, Kotaro Shikata¹, Norihiro Takamune¹, Hirokazu Kameoka²

¹The University of Tokyo, ²The University of Tokyo/ NTT CS Lab.

04:30 PM - 05:50 PM Oral Session 9: Rhythm & Beat (OS9) [Auditorium]

Chair: Andre Holzapfel

(OS9-1) Design And Evaluation of Onset Detectors using Different Fusion Policies

MiTian, GyörgyFazekas, Dawn A. A. Black, Mark Sandler

Centre for Digital Music, Queen Mary University of London

(OS9-2) Evaluating the Evaluation Measures for Beat Tracking

Matthew Davies¹ and Sebastian Böck²

¹INESC TEC, ²Johannes Kepler University

(OS9-3) Improving Rhythmic Transcriptions via Probability Models
Applied Post-OMR

Maura Church¹ and Michael Scott Cuthbert²

¹Harvard University & Google Inc., ²MIT, Music and Theater Arts

(OS9-4) Classifying EEG Recordings of Rhythm Perception

Sebastian Stober, Daniel J. Cameron, Jessica A. Grahn

Brain and Mind Institute, Western University, Canada

06:30 PM - 09:00 PM Banquet [Kunlun Hall (12F)]

Friday October 31st, 2014

09:00 AM - 09:40 AM MIREX Oral Session [Auditorium]

Chair: J. Stephen Downie

(MOS) Ten Years of MIREX (Music Information Retrieval Evaluation
eXchange): Reflections, Challenges and Opportunities

*J. Stephen Downie¹, Xiao Hu², Jin Ha Lee³, Kahyun Choi¹, Sally Jo
Cunningham⁴, Yun Hao¹*

¹University of Illinois, ²University of Hong Kong, ³University of Washington,

⁴University of Waikato

09:40 AM - 10:20 AM MIREX Grand Challenge [Auditorium]

10:20 AM - 11:40 AM MIREX Poster Session [Song Bo Room]

11:40 AM - 12:40 PM Business Meeting [Auditorium]

12:40 PM - 01:00 PM Closing [Auditorium]

02:00 PM - 03:30 PM Late-breaking and Demo Session [Song Bo Room,
Chang Chin Room]

03:30 PM - 06:00 PM Unconference [Auditorium, Song Bo Room, Chang
Chin Room, The Grand VIP Room]

Late-breaking and Demo (LBD) Session

The LBD session serves as the joint event for presentations of the late-breaking and demo papers. A late-breaking paper may present preliminary results and ideas that are not yet fully formed nor systematically evaluated, but interesting for the MIR community. Additionally, LBD also provides a venue for demonstrations of applications or prototypes that are of interest to the MIR community. This year we have accepted 24 late-breaking and demo papers, where 23 poster presentations will be located in Song Bo Room, and one special demo (called “The Piano Companion”) will be held in Chang Chin Room. Please refer to page 58 for the floor map. These LBD papers will be available online at the official website of ISMIR 2014.

Unconference Session

ISMIR2014 features a more informal, group brainstorming event in the afternoon of the last conference day. Building upon the experience of the last two ISMIRs, an online discussion forum is created to collect potential topics for the pre-planning of the unconference events. No deadline is imposed, allowing last-minute ideas developed during the conference to be discussed. The advantage of this kind of event is its capacity to foster engaging conversations and interactions among participants across a wide range of seniority and experience, as opposed to the conventional speaker-audience conference paradigm. More guidelines can be found here: <http://goo.gl/kHRoZt>

You are very welcome to post any last-minute ideas during the conference through the following collaborative forum: <https://groups.google.com/a/ismir.net/forum/#!forum/ismir2014-unconference-forum>

ISMIR attendees who would like to join the unconference session will be

assembled in the Auditorium room at 15:30, Friday October 31st. In the beginning, a plenary session will take place for announcement and last minute event calls. An event “facilitator” will be named as being responsible for enabling and steering discussion during the session. Then, the unconference guidelines will be quickly summarized and the events will start.

The venue will have five meeting rooms for unconference (see pages 59 for the floor map), each can accommodate 20-30 attendees, and three of them are equipped with projectors. We will hold 5 events in parallel. Each event will be scheduled 30 minutes long, and 10 minutes break. During the event, a timekeeper will actively ensure that events adhere to the time limits outlined, which are tentatively scheduled as follows:

15:30 – 16:00 Unconference Plenary (Auditorium)

16:00 – 16:10 Break

16:10 – 16:40 Event-1 (Meeting Rooms 1 - 5)

16:40 – 16:50 Break

16:50 – 17:20 Event-2 (Meeting Rooms 1 - 5)

17:20 – 17:30 Break

17:30 – 18:00 Event-3 (Meeting Rooms 1 - 5)

ISMIR/WOCMAT 2014 Concert

Wednesday October 29th, 19:00-21:40

Venue: 10F Auditorium Room, Grand Hotel Taipei

Composer's Name	Piece Title	Nationality	Instrumentation	Length
Jason Richmond	Echo's in the Sky	USA	Acousmatic 2-channel	4'56"
Joao Pedro Oliveira	Hydatos	Brazil	Multimedia Electroacoustic Music	8'37"
Kevin Austin	Episodes from Bo le, Challenges	Canada	Guzheng and 4-channel Electronics	7'45"
			Guzheng: Shih-Ya Hong	
John Nichols III	Amovi Alaan	USA	Acousmatic 2-channel	6'30"
Ayako Sato	sen no kagiroi	Japan	Acousmatic 2-channel	7'
Jonathan Marmor	Jonathan Marmor	USA	Violin and Bass Erhu (Algorithmic Composition)	3'
			Violin: Yang-Chin Chen	
			Bass Erhu: Pei-Yu Liao	
Sunhuimei Xia	Mirage	China/USA	Acousmatic 2-channel	7'
Sandra Tavali (Wan-ching Li)	Ban Shan	Taiwan	Acousmatic 2-channel	4'30"
Jacob Sudol	Vanished into the Clouds	USA	Cello and Live Electronics	10'
			Cello: Chih-Ying Wei	
Giulio Colangelo	Organimo Aperto No. 1	Italy	String Quartet & Electronics	5'20"
			String Quartet: Lyre Chamber Musicians	

~ Intermission (10-min.) ~				
Yu-Chuang Tseng	Gesture,Idea, and Image ii	Taiwan	Shakuhachi and Live Electronics	8'10"
			Shakuhachi: Ting Hao Wang	
John Nelson	Bebop in the Forest of Lonely Rhythms	USA	Flute and Interactive Electronics	13'30"
			Flute: Yi-Hui Lin	
Lin-Ni Liao	Le train de la vie III - WE	France/ Taiwan	Erhu and Electronics	11'56"
			Erhu: Ying-Chieh Wang	
Jeff (Chih-Fang) Huang	Green	Taiwan	Erhu and Live Electronics	7'08"
			Erhu: Pei-Yu Liao	
Lin Shen	Memories of Folk Songs in Jiashan Region	China	Acousmatic 4-channel	7'
	(Staff record and sung by Xian Zhao)			
Christian Eloy	in the Cybele's gardens	France	Acousmatic 2-channel	8'
Shing-Kwei Tzeng	Tai-chi 42 Postures	Taiwan	Interactive Performance	7'
National GuoGuang Opera Company	Beijing Opera Demo : Excerpt from "The Fourth Son of the Yang Family Visiting His Mother"	Taiwan	Jingju Ensemble	25'
			Director: Yi-Chiao Wang	
			Narrator: Rafael Caro	
~ Good Night ~				

Music Jury

Yu-Chung Tseng

Jeff (Chih-Fang) Huang

Shing-Kwei Tzeng

Reviewers

ISMIR2014 would like to acknowledge the following people for their expert assistance in evaluating manuscripts.

Samer Abdallah

Jakob Abesser

Teppo Ahonen

Joshua Albrecht

Anna Aljanaki

Vinoo Alluri

Joakim Anden

Tom Arjannikov

Andreas Arzt

Jean-Julien Aucouturier

Roland Badeau

Isabel Barbancho

Ana Maria Barbancho

Mathieu Barthet

Eric Battenberg

Dogac Basaran

Juan Pablo Bello

Emmanouil Benetos

CirilBohak

Antonio Bonafonte

Juanjo Bosch

Baris Bozkurt

Ashley Burgoyne

Sebastian Bock

Marcelo Caetano

Emilios

Cambouropoulos

Estefania Cano

Mark Cartwright

Tak-Shing Chan

Chih-Ming Chen

Alex Chen

Elaine Chew

Ching-Hua Chuan

Andrea Cogliati

Gina Collecchia

Tom Collins

Darrell Conklin

Arshia Cont

Courtenay Cotton

Emanuele Coviello

Sally Jo Cunningham

Michael Scott Cuthbert

Roger Dannenberg

Matthew Davies

Bas de Haas

Alceu de Souza Britto Jr.

Norberto Degara

Francois Deliege

Arnaud Dessein

Johanna Devaney

Sander Dieleman

Christian Dittmar

J. Stephen Downie

Jonathan Driedger

Zhiyao Duan

Georgi Dzhambazov

Tuomas Eerola

Andreas Ehmann

Katherine Ellis

Dan Ellis

Valentin Emiya

Paulo Esquef

Slim Essid

Sebastian Ewert

Angel Faraldo

George Fazekas

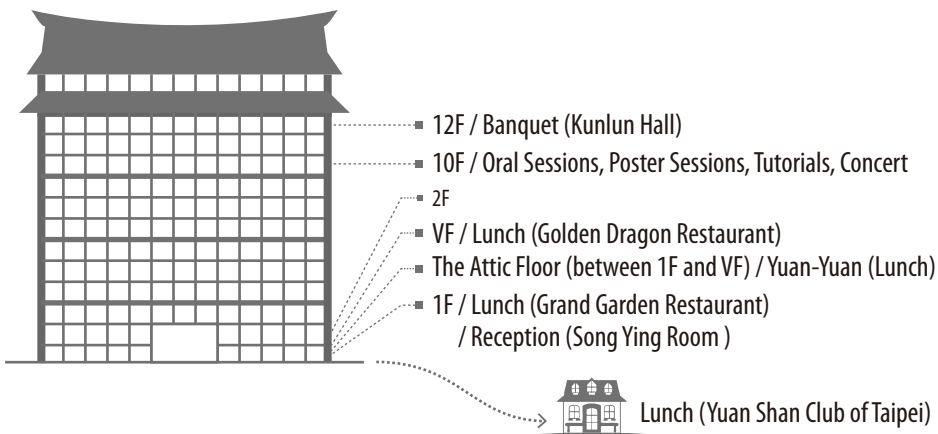
Rebecca Fiebrink

Thomas Fillon

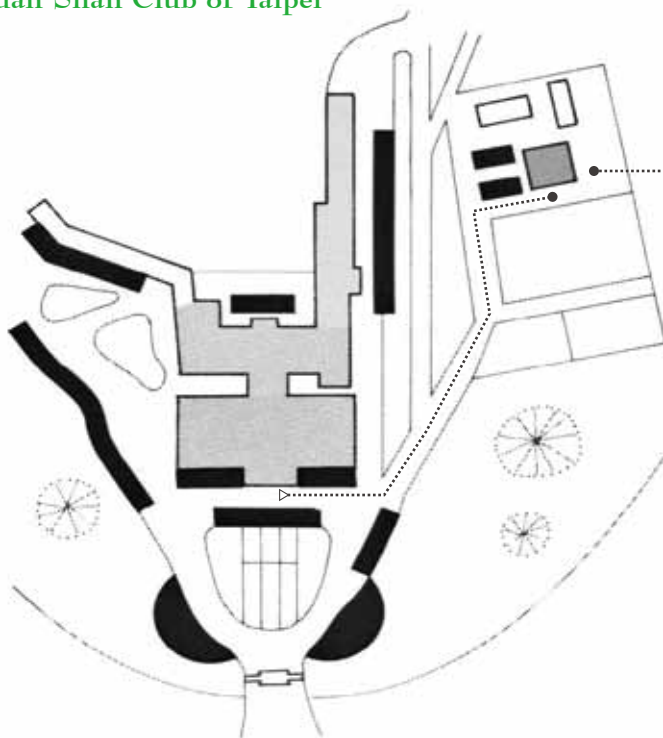
Derry Fitzgerald	Po-Sen Huang	Paul Lamere
Nicole Flaig	Anna Huang	Thibault Langlois
Arthur Flexer	Eric Humphrey	Audrey Laplante
Nuno Fonseca	Fernando Iazzetta	Olivier Lartillot
Frederic Font	VaivaImbrasaitė	Kyogu Lee
Jose Fornari	VigneshIshwar	Andreas Lehmann
Ichiro Fujinaga	Akinori Ito	Bernhard Lehner
Satoru Fukayama	KatsutoshiItoyama	Kjell Lemstrom
Daniel Gaertner	OzgurIzmirli	David Lewis
Martin Gasser	Jordi Janer	Dawen Liang
Ali CenkGedik	Tristan Jehan	Cynthia Liem
Mathieu Giraud	Kristoffer Jensen	Daryl Lim
Aggelos Gkiokas	Cyril Joder	Jen-Yu Liu
Fabien Gouyon	SergiJorda	Yi-Wen Liu
Maarten Grachten	Hirokazu Kameoka	Antoine Liutkus
Garth Griffin	Kunio Kashino	Jorn Loviscach
Thomas Grill	Haruhiro Katayose	Hanna Lukashevich
David Grunberg	Damian Keller	Esteban Maestre
Enric Guaus	Johannes Kepper	Adolfo Maia Jr.
Sankalp Gulati	Corey Kereliuk	Michael Mandel
Michael Gurevich	Tetsuro Kitahara	Matija Marolt
Emilia Gomez	Anssi Klapuri	Luis Gustavo Martins
Philippe Hamel	Peter Knees	Agustin Martorell
Jinyu Han	Ian Knopke	Matthias Mauch
Andrew Hankinson	Gopala Krishna Koduri	Rudolf Mayer
Pierre Hanna	Noam Koenigstein	Brian McFee
Mikael Henaff	Alessandro Koerich	Cory McKay
Martin Hermant	Filip Korzeniowski	Matt McVicar
Perfecto Herrera	Florian Krebs	Nicola Montecchio
Jason Hockman	Nadine Kroher	Josh Moore
Matt Hoffman	Lun-Wei Ku	Marcela Morvidone
Andre Holzapfel	Frank Kurth	Manuel Moussallam
Yajie Hu	Mathieu Lagrange	Meinard Mueller

Daniel Mullensiefen	Ana Rebelo	Li Su
Hidehisa Nagano	Gang Ren	Alvin Wen Yu Su
Masahiro Nakano	Christophe Rhodes	Atau Tanaka
Tomoyasu Nakano	Gael Richard	damientardieu
Juhan Nam	David Rizo	David Temperley
Eric Nichols	Matthias Robine	Steve Tjoa
Oriol Nieto	Martin Rocamora	Marko Tkalcic
Mitsunori Ogihara	Marcelo Rodriguez	Petri Toiviainen
Yasunori Ohishi	Lopez	Godfried Toussaint
Nobutaka Ono	Perry Roland	Wei-Ho Tsai
Carthach ONuanain	Gerard Roma	Douglas Turnbull
Nicola Orio	Justin Salamon	George Tzanetakis
Alexei Ozerov	Andy Sarroff	Julian Urbano
Francois Pachet	Markus Schedl	Yonatan Vaizman
Rui Pedro Paiva	Jan Schlueter	Jan Van Balen
Helene Papadopoulos	Erik Schmidt	Remco Veltkamp
Tae Hong Park	Bjoern Schuller	Emmanuel Vincent
Jouni Paulus	Jeff Scott	Richard Vogl
Johan Pauwels	Sertan Senturk	Anja Volk
Steffen Pauws	Xavier Serra	Ge Wang
Geoffroy Peeters	Joan Serra	Xing Wang
Graham Percival	Ian Simon	Ju-Chiang Wang
Antonio Pertusa	George Sioros	Ron Weiss
Pedro Pestana	Paris Smaragdis	Felix Weninger
Aggelos Pikrakis	Jordan Smith	Tillman Weyde
Thomas Praetlich	Lloyd Smith	Ian Whalley
Matthew Prockup	Yading Song	Frans Wiering
Laurent Pugin	Reinhard Sonnleitner	Geraint Wiggins
Marcelo Queiroz	Mohamed Sordo	Ben Wu
Stanislaw Raczynski	Ajay Srinivasamurthy	Fu-Hai Frank Wu
Colin Raffel	Adam Stark	Guangyu Xia
Zafar Raffi	Sebastian Stober	Kazuyoshi Yoshii
Mathieu Ramona	Dan Stowell	
Andreas Rauber	Bob Sturm	

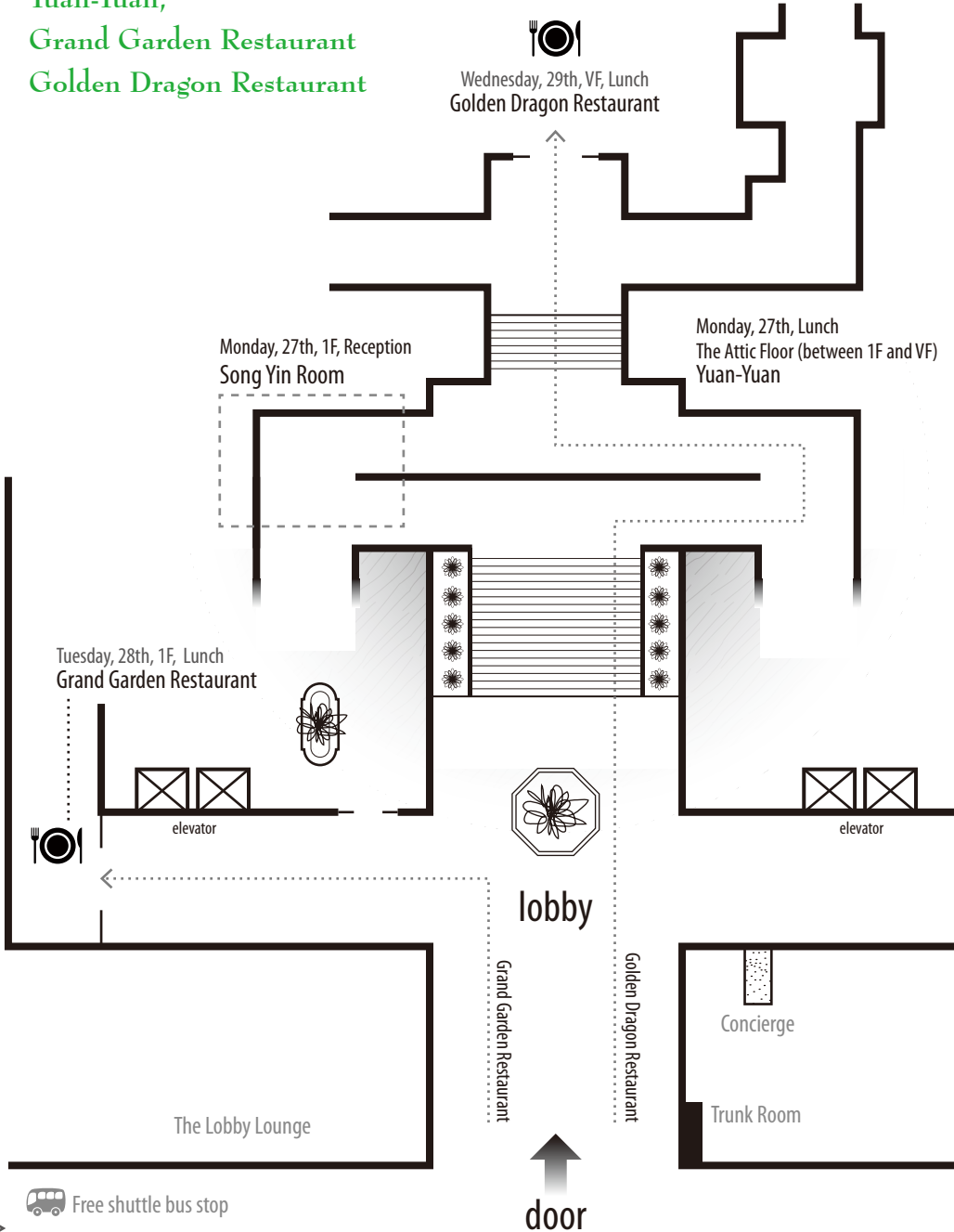
Floor Maps



Yuan Shan Club of Taipei

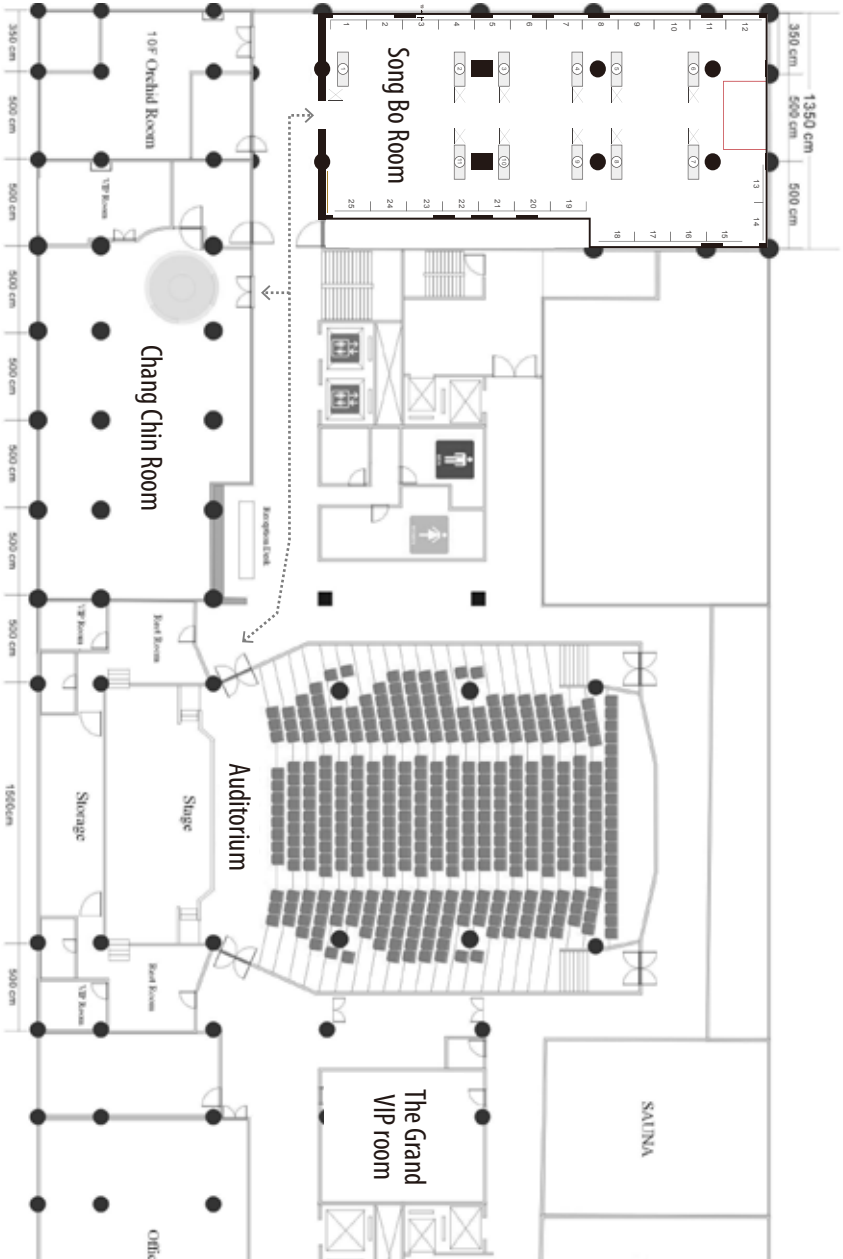


Yuan-Yuan,
Grand Garden Restaurant
Golden Dragon Restaurant

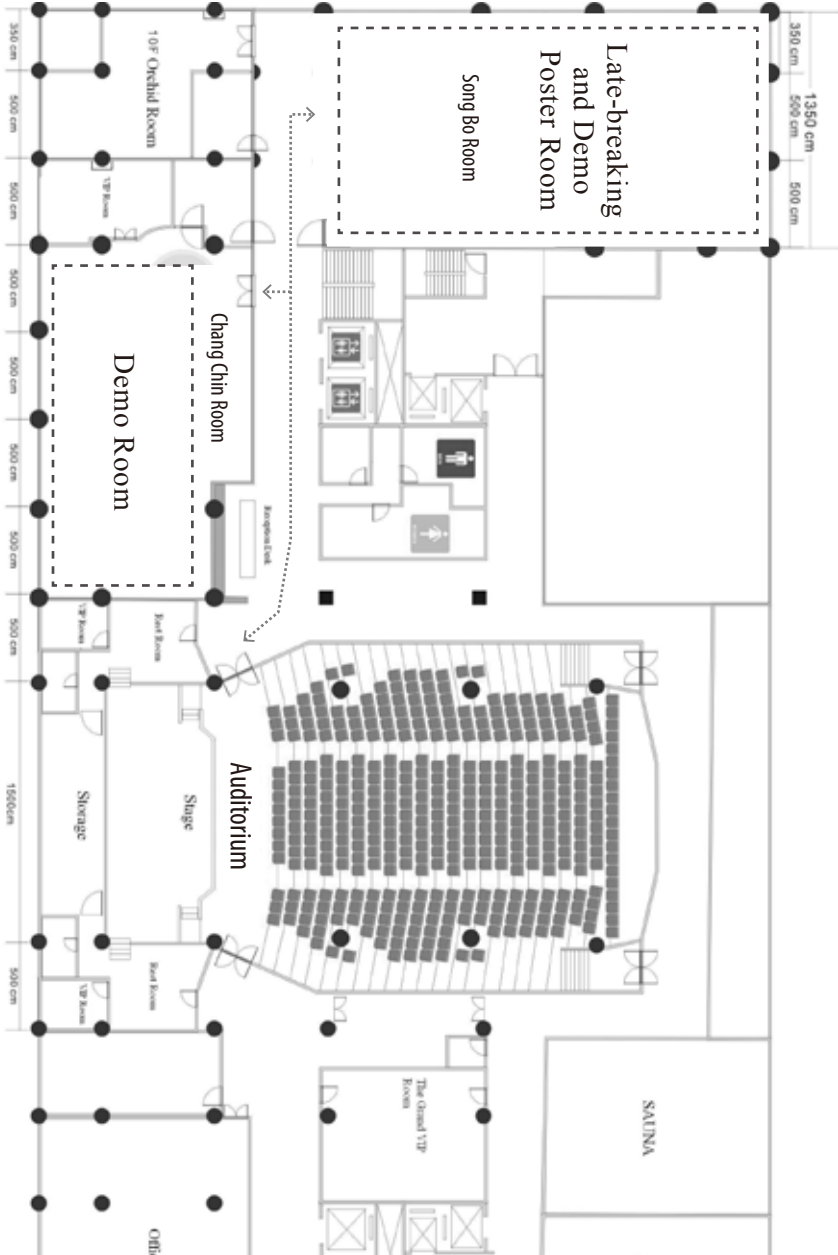


 Free shuttle bus stop

Oral Sessions, Poster Sessions, Tutorials, Concert, 10F



Late-breaking and Demo, 10F





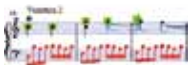
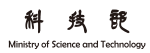
Best Oral Presentation

1. You can only vote for one paper,
2. Please write down the ID of the paper (e.g. OS1-1)



Best Poster Presentation

1. You can only vote for one paper,
2. Please write down the ID of the paper (e.g. PS1-1)



CONFERENCE PROGRAM

Day 1 (Monday, 27th)	Day 2 (Tuesday, 28th)	Day 3 (Wednesday, 29th)	Day 4 (Thursday, 30th)	Day 5 (Friday, 31st)
	8:40-9:00 Opening Auditorium	8:00-9:00 Women in MIR meeting Song Bo Room		
10:00-13:00 Tutorials 1/2 Chang Chin Room / Song Bo Room	9:00-10:20 Oral Session (OS1) Auditorium 10:20-12:00 Poster Session (PS1) Song Bo Room	9:00-10:20 Oral Session (OS4) Auditorium 10:20-12:00 Poster Session (PS2) Song Bo Room	9:00-10:20 Oral Session (OS7) Auditorium 10:20-12:00 Poster Session (PS3) Song Bo Room	9:00-9:40 MIREX session (oral) Auditorium 9:40-10:20 MIREX session (grand challenge) Auditorium
13:00-14:30 Lunch Yuan-Yuan Restaurant	12:00-13:30 Lunch Grand Garden Restaurant	12:00-13:30 Lunch Golden Dragon Restaurant	12:00-13:30 Lunch Yuan Shan Club of Taipei	10:20-11:40 MIREX session (poster) Song Bo Room
14:30-17:30 Tutorials 3/4 Chang Chin Room / Song Bo Room	13:30-14:30 Keynote Speech 1 Auditorium 14:30-15:30 Oral Session (OS2) Auditorium 15:30-16:30 Poster Session (PS1) Song Bo Room	13:30-14:30 Keynote Speech 2 Auditorium 14:30-15:30 Oral Session (OS5) Auditorium 15:30-16:30 Poster Session (PS2) Song Bo Room	13:30-14:30 Industrial Panel Auditorium 14:30-15:30 Oral Session (OS8) Auditorium 15:30-16:30 Poster Session (PS3) Song Bo Room	11:40-12:40 Business Meeting Auditorium 12:40-13:00 Closing Auditorium 13:00-14:00 Lunch on your own
	16:30-18:10 Oral Session (OS3) Auditorium	16:30-17:10 Oral Session (OS6) Auditorium	16:30-17:50 Oral Session (OS9) Auditorium	14:00-15:30 Late-breaking and Demo Session Song Bo Room, Chang Chin Room 15:30-18:00 Unconference Auditorium, Song Bo Room, Chang Chin Room, The Grand VIP Room
18:00-20:00 Reception Song Ying Room (1F)		17:10-18:00 Mixer Song Bo Room	18:30-21:00 Banquet Kunlun Hall (12F)	
		19:00-22:00 Concert Auditorium		