



# 8th International Conference on Environmental and Engineering Geophysics

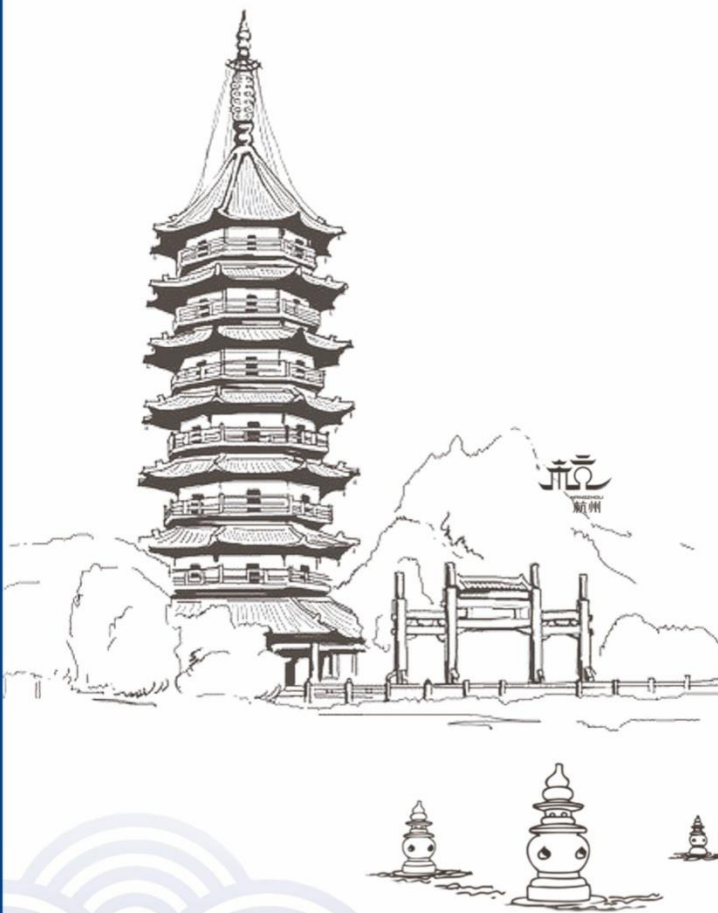
Near-surface Geophysics  
and  
Habitability

Official Program

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Hangzhou, China

June 10~14, 2018



# Onsite Rules and Instructions

**Date:** June 10~14, 2018

## **Check-in:**

1. Place: Yuanzheng-Qizhen Hotel, Zijingang Campus, Zhejiang University
2. Time: June 10 8:00~20:00  
June 11-13 8:30~17:00

## **Daily Schedule:**

1. Oral Presentation: 8:30-12:00, 14:00-17:30
2. Poster Presentation: 14:00-17:30, June 12, Shunshui Hall (4th Floor)
3. Lunch: 11:30-13:00, First Floor
4. Dinner: 17:30-19:30, First Floor
5. Gala Dinner: 18:00-20:00, June 11, Second Floor

## **Accommodation:**

Check in at Yuanzheng-Qizhen Hotel, which is also the Conference Venue of ICEEG 2018.

## **Presentation Notes:**

1. 30~35 minutes for an invited presentation and 15 minutes for a normal presentation;
2. During the workshop, the participants shall not copy, photograph or video record any materials without the consent of the presenters or the organizing committee.

## **Notice:**

- Please comply with the venue disciplines during the meetings and smoking is forbidden in the meeting area.
- Please mind your own safety, take care of your belongings and prevent accidents in any forms.
- If the fire incident or other disasters occur during the meeting, the participants should leave through the nearest exit immediately and congestion should be prevented
- If any emergencies happen during the meeting, please contact the onsite staff immediately or call the telephone number as follows to ask for help:

*Gang Tian: 86 13588154791*

*Huajun Wang: 86 15988121845*

*Wenke Zhao: 86 15088689227*

*Jing Zheng: 86 18069872127*

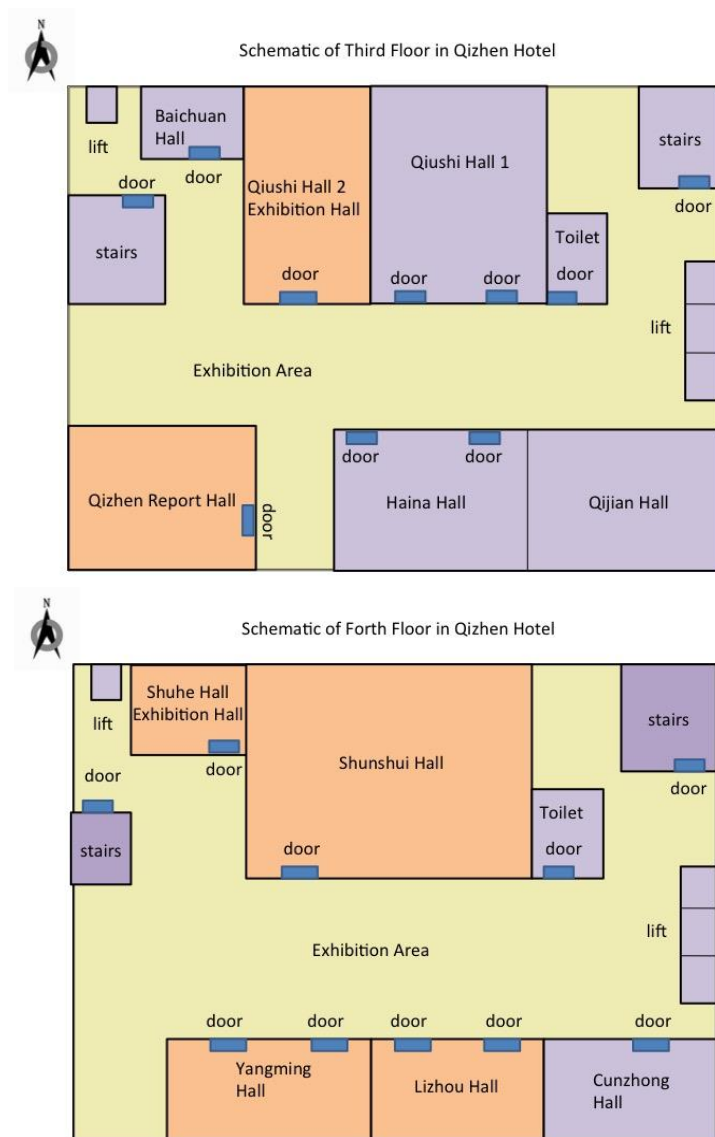
**We wish you have a pleasant stay and a successful conference in Hangzhou!**

**ICEEG 2018 Organizing Committee**

## Location Map of the Conference Venue



## Schematic of the Conference Venue



**Address:** Yuanzheng-Qizhen Hotel, Zijingang Campus, Zhejiang University

**TEL:** 86-571-88982888

## **Organizers**

Zhejiang University  
Chinese Geophysical Society  
Division of Energy and Mining Engineering, Chinese Academy of Engineering  
Committee of Near-Surface Geophysics, Chinese Geophysical Society  
Department of Earth Sciences, National Natural Science Foundation of China  
China University of Geosciences (Wuhan)  
Central South University  
Chengdu University of Technology  
Chang'an University  
Institute of Geology and Geophysics, Chinese Academy of Sciences  
China University of Mining of Technology (Beijing)  
State Key Laboratory of Coal Resources and Safe Mining  
Zhejiang Geophysical Society  
Zhejiang Signal Processing Society

## **Host**

Zhejiang University

## **Organizing Committee**

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Jingwen Mao				

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Hanlin Chen	Jianghai Xia
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Ed Woolery	Xiangyun Hu	Xuben Wang	Jianxin Liu	Xiu Li
Guoqiang Xue	Jiulong Cheng	Zhaofa Zeng		

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Changchun Yin        Sheng Yu            Xiangyun Hu        Zhaofa Zeng        Xiu Li  
Jianghai Xia

## **Editorial Board**

**Editor-in-chief**        Gang Tian

### **Editors**

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## An Introduction to School of Earth Sciences, Zhejiang University



School of Earth Sciences (SES) was founded in 1936 by Prof. Zhu Kezeng who was the former president of Zhejiang University (ZJU) and a meteorologist. After 80 years of development, Earth Sciences in ZJU has grown into a comprehensive academic discipline. More than 30 academicians have studied and worked here, including the founders of the geoscience field in China.

SES currently has four departments, i.e. Geology, Geography, Atmospheric Sciences, and Earth Information Science and Technology, offering 5 undergraduate student programs and 8 post-graduate student programs. SES houses Provincial Key Laboratory of Resources and Environment and Geographic Information System, and Structural Research Centre of Oil and Gas Bearing Basin (Ministry of Education), and six institutes, i.e. Geology and Geophysics, Space Information and Technique, Geographic Information Science, District and Urban Development, Environment and Biogeochemistry, and Climate and Weather Information.

SES has a total of 89 staff members, including 37 professors, 35 associate professors, 2 academicians, 2 dual-employed academicians, 2 professors of "Thousand Talent Program", 1 chair professor of "Chang Jiang Scholars Program", and 2 professionals supported by "National Science Fund for Distinguished Young Scholars".

SES has attached great importance to innovation, deepened the education and teaching reform, and continuously been improving the quality of teaching. SES has also established cooperation with University of Hawaii and Indiana University, hired several professors from the world top universities, and opened a series of international courses.



Conference schedule

<b>Sunday, June 10, 2018</b>		
<b>ICEEG Union Conference at Cunzhong Hall (4th Floor)</b>		
<b>19:00-20:30</b>	<b>Zhejiang University</b> <b>China University of Geosciences (Wuhan)</b> <b>Central South University</b> <b>Chengdu University of Technology</b> <b>Chang'an University</b> <b>Institute of Geology and Geophysics, Chinese Academy of Sciences</b> <b>China University of Mining of Technology (Beijing)</b> <b>China University of Geosciences (Beijing)</b> <b>Jilin University</b>	
<b>Monday, June 11, 2018</b>		
<b>Opening Ceremony at Qizhen Hall (3rd Floor)</b>		
<b>Chair: Jianghai Xia</b>		
<b>8: 30-9:00</b>	<b>Speech by President of Zhejiang University</b> <b>Speech by President of Chinese Geophysical Society, Academician Xiaofei Chen</b> <b>Speech by Dean of School of Earth Sciences, Zhejiang University, Professor Qunke Xia</b>	
<b>9:00-9:30</b>	<b>Conference Group Photograph</b>	
<b>Keynote Presentations and General Assembly at Qizhen Hall (3rd Floor)</b>		
<b>Keynote Presentations</b>		<b>Co-Chairs: Klaus Holliger, Yixian Xu</b>
<b>9:30-10:05</b>	<b>Wencai Yang</b> <i>Zhejiang University</i>	<b>Building Underground Communities in Smarter Hilly Cities</b>
<b>10:05-10:40</b>	<b>Lee Slater</b> <i>Rutgers University</i>	<b>Understanding Hydrological Connectivity of Nutrient Transport from Agricultural Fields to Drainage Ditches Using Electrical Geophysics</b>
<b>10:40-11:15</b>	<b>Shuwen Dong</b> <i>Nanjing University</i>	<b>Outline of Progress and Prospect of SinoProbe</b>
<b>11:15-11:50</b>	<b>Larose Eric</b> <i>ISTerre, CNRS</i>	<b>Environmental Seismology: Monitoring Surface Process with Ambient Seismic Noise</b>
<b>12:00-13:00</b>	<b>Lunch</b>	
<b>General Assembly</b>		<b>Co-Chairs: Lee Slater, Haijiang Zhang</b>
<b>14:00-14:35</b>	<b>Michele Pipan</b> <i>University of Trieste</i>	<b>Advancements in Inversion and Interpretation of Common Offset GPR Datasets</b>
<b>14:35-15:10</b>	<b>Qingyun Di</b> <i>Chinese Academy of Sciences</i>	<b>The Prospect of Application of M-TEM Method and High Density Resistivity Method in Xiong'an New Area</b>
<b>15:10-15:45</b>	<b>Kamini Singha</b> <i>Colorado School of Mines</i>	<b>Quantifying Non-local Solute Transport Behavior with Electrical Geophysics: A Review</b>
<b>15:45-16:00</b>	<b>Tea and coffee break</b>	
<b>16:00-16:35</b>	<b>Lanbo Liu</b> <i>University of Connecticut</i>	<b>High Resolution Formation Characterization with 3-component Ambient Noise Records</b>
<b>16:35-17:10</b>	<b>Edward Woolery</b> <i>University of Kentucky</i>	<b>Fault-controlled Contaminant Plume Migration: Inferences From SH-wave Reflection and Electrical Resistivity Experiments</b>
<b>17:10-17:45</b>	<b>Gang Tian</b> <i>Zhejiang University</i>	<b>How to Improve the Vertical Resolution of Seismics in Urban Underground Space Investigation</b>

## Conference schedule

<b>Tuesday, June 12, 2018</b>		
<b>Session 1: Seismic Exploration and Passive Seismic      Conference Room I --- Yangming Hall (4th Floor)</b>		
<b>Co-Chairs: John Bradford, Lanbo Liu, Qingchun Li</b>		
8:30-8:45	Klaus Holliger <i>University of Lausanne</i>	Estimating Fracture Aperture and Related Parameters from Tube-wave Data through Bayesian Inversion
8:45-9:00	Klaus Holliger <i>University of Lausanne</i>	High-resolution Seismic Reflection Survey across the Insubric Line, Italian Alps
9:00-9:15	Limin Wang <i>China University of Geosciences, Wuhan</i>	On Application of Seismic Reflection Method in Geological Mapping in the Gobi Desert Covered Region: A Case Study in Hami Basin in XinJiang Province, China
9:15-9:30	Fangzheng Lu <i>Zhejiang University</i>	Waveform Migration of Scattering Seismic Data
9:30-9:45	Yinuo Zhu <i>Jilin University</i>	Accuracy Analysis of Refraction Interpretation Method
9:45-10:00	Zhiwei Gu <i>Zhejiang University</i>	Primary Reflection Wave Equation Based on Reflectivity and Wave Field Simulation
10:00-10:30	<b>Tea and coffee break</b>	
10:30-10:45	Ya Liu <i>Zhejiang University</i>	A Review of Ambient Noise Seismic Interferometry and Its Applications in Near Surface
10:45-11:00	Jingyin Pang <i>China University of Geosciences, Wuhan</i>	Quality Improvement of Surface Waves Extracted From Urban Ambient Noise
11:00-11:15	Jinsheng Jiang <i>Zhejiang University</i>	On Extracting the P-wave Reflection from Seismic Ambient Noise
11:15-11:30	Hongyu Zhang <i>China University of Geosciences, Wuhan</i>	Extracting Surface Waves Using Phased-Weighted Stacking
<b>Session 2: Engineering Geophysics      Conference Room II --- Lizhou Hall (4th Floor)</b>		
<b>Co-Chairs: Edward Woolery, Chih-Ping Lin, Juzhi Deng</b>		
<b>8:30-9:00</b>	<b>Chih-Ping Lin</b> <i>National Chiao Tung University</i> <i>(Invited Speaker)</i>	<b>Geophysics-assisted Control and Evaluation of Geotechnical Construction-Jet Grouting</b>
9:00-9:15	Hai Liu <i>Guangzhou University</i>	Automatic Detection of Reinforcing Rebar Using GPR and EMI
9:15-9:30	He Li <i>Chang'an University</i>	Application of High Performance Transient Electromagnetic Antenna in Urban Underground Space
9:30-9:45	Kailiang Lu <i>Chang'an University</i>	Fine Simulation of High Performance Radiation Source in Urban Underground Complex Pipe Network
9:45-10:00	Shujun Meng <i>Guilin University of Technology</i>	Two-dimensional Tomographic Results for Concrete Quality Detecting by Radar
10:00-10:30	<b>Tea and coffee break</b>	
10:30-10:45	Huang Chen <i>Central South University</i>	A Novel Integral Solution for Three-dimensional Direct Current Resistivity Problem with Topography



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10:45-11:00	Xucheng Hong <i>Zhejiang Engineering Geophysical Prospecting Institute</i>	Numerical Simulation and Application of TST Tunnel Geological Advanced Prediction
11:00-11:15	Fengfeng Cao <i>Chang'an University</i>	Detection of Shallow Unexploded Bomb by Ultra-low-altitude Airborne Transient Electromagnetic Method
11:15-11:30	Ruofan Zhao <i>Chang'an University</i>	Magnetic Resonance Approach to Characterize Water and Mud Inrush of Tunneling in Fault and Fractured Zone
<b>Session 3: Surface Wave      Conference Room III --- Shunshui Hall (4th Floor)</b>		
<b>Co-Chairs: Jeramy Ashlock, Jianghai Xia</b>		
<b>8:30-9:00</b>	<b>Jeramy Ashlock</b> <i>Iowa State University</i> <i>(Invited Speaker)</i>	<b>Applications of the Minimally-invasive Multimodal Surface Wave (MMSW) Method</b>
9:00-9:15	Changjiang Zhou <i>Zhejiang University</i>	The Potential of CUDA-based Acceleration of Elastic Wavefield Modeling and Inversion
9:15-9:30	Yu Zhang <i>Wuhan University</i>	Near Surface Seismic Wave Fields in an Unsaturated Porous Medium
9:30-9:45	Chaoqiang Xi <i>Zhejiang University</i>	Effects of Topography on Propagation of High-frequency Love Waves
9:45-10:00	Yingwei Yan <i>Jilin University</i>	SH- and Love-wave Full-waveform Inversion in Time Domain with Preconditioned Technique
10:00-10:30	<b>Tea and coffee break</b>	
10:30-10:45	Shaofeng Cai <i>China Railway First Survey and Design Institute Group Co., Ltd</i>	The Absorption and Scattering Comprehensive Analysis Method Based on CMPCC Two-dimensional Surface Waves
10:45-11:00	Ling Ning <i>China University of Geosciences, Wuhan</i>	The Wave-type Conversion of Rayleigh Waves on Depressed Topography Surface
11:00-11:15	Tianyu Dai <i>China University of Geosciences, Wuhan</i>	Extracting Dispersion Curves Using Semantic Segmentation of Fully Convolutional Networks
11:15-11:30	Jiwen Huang <i>Central South University</i>	Separating the High and Fundamental Mode Rayleigh Wave Based on 2D Digital Filter Method
11:30-11:45	Tong Shen <i>Chengdu University of Technology</i>	Study on the Influence of Micro-seismic Phase Window Selection on the Application of AIC Picker in the First Arrival Picking
<b>Session 4: Environmental and Hydrological Geophysics      Conference Room I --- Yangming Hall (4th Floor)</b>		
<b>Co-Chairs: Klaus Holliger, Zhaofa Zeng</b>		
<b>14:00-14:30</b>	<b>John Bradford</b> <i>Colorado School of Mines</i> <i>(Invited Speaker)</i>	<b>Geophysical Investigation of the Effect of Aspect and Elevation of Critical Zone Architecture in the Reynolds Creek Critical Zone Observatory</b>
14:30-14:45	Rochus Souan <i>Geotomographie GmbH</i>	A Hydro-geophysical Tomographic Approach to Model Groundwater Flow and Transport
14:45-15:00	Julien Gance <i>Bureau de Recherches Geologiques et Minières</i>	Electrical Resistivity Tomography for Environmental and Risk Assessment issues

## Conference schedule

15:00-15:15	David Nobes <i>East China University of Technology</i>	Imaging of Active Hydrological Processes Using Ground Penetrating Radar
15:15-15:30	Haoli Xu <i>Army Engineering University of PLA</i>	Numerical and Physical Modeling of Transient Electromagnetic Response of Water-rich Zone
15:30-16:00	<b>Tea and coffee break</b>	
16:00-16:15	Lei Tan <i>Zhejiang Institute of Hydraulics &amp; Estuary</i>	Application of Parallel Electrical Method to Rapid Detection of Irrigation District Leakage
16:15-16:30	Parisa Imani <i>Zhejiang University</i>	Application of Electrical Resistivity Tomography and Seismic Refraction Tomography Methods on Landslide Studies: Case Study
16:30-16:45	Qinbo Cheng <i>Hohai University</i>	Detection of Karst Aquifer Structure by 3D Electric Resistivity Tomography (ERT)
16:45-17:00	Ibrar Iqbal <i>Zhejiang University</i>	Theoretical Investigation of Low Conductive NAPL Using (AVO) Analysis of GPR Data
17:00-17:15	Xiaobin Li <i>Henan Polytechnic University</i>	Numerical Simulation Method of Long Electrode Electrical Prospecting for Monitoring Landslides Hydro-geologic Conditions
<b>Session 5: Ground-Penetrating Radar                      Conference Room II --- Lizhou Hall (4th Floor)</b>		
<b>Co-Chairs: Michele Pipan, Sixin Liu, Wenke Zhao</b>		
14:00-14:15	Bangbing Wang <i>Zhejiang University</i>	De-stripping Noise in Airborne Radar Data by Wavelet Filtering
14:15-14:30	Zhiwei Xu <i>China University of Geosciences, Wuhan</i>	Estimation of the Spatial Correlation Structure of a Heterogeneous Fluvial Aquifer from 3D GPR Data
14:30-14:45	Lei Fu <i>Jilin University</i>	Migration Image Deblurring for Ground Penetrating Radar Data
14:45-15:00	Minglin Wang <i>Guilin University of Technology</i>	Simulation of Ground Penetrating Radar on Dispersive Media Based on Finite Element Time Domain Method
15:00-15:15	Erqiao Song <i>Jilin University</i>	Application of GPR Data Processing Based on the Variational-Mode Decomposition
15:15-15:30	Jun Yang <i>Guilin University of Technology</i>	Hybrid Filter for Ground Penetrating Radar Data Using Wavelet and Curvelet Transform
15:30-16:00	<b>Tea and coffee break</b>	
16:00-16:15	Zhouwen Hu <i>China University of Geosciences, Beijing</i>	Application of GPR Time-domain Full Waveform Inversion for Concrete Structure Detection
16:15-16:30	Xudong Wang <i>Jilin University</i>	A Rock-filled Dam Leakage Detection by Borehole Radar
16:30-16:45	Yaohua Li <i>China Aerospace Academy of Architectural Design &amp; Research Co., Ltd.</i>	Application of GPR Signal Processing Technology about Spectral Energy for Large Depth and Refinement in Geological Investigation
16:45-17:00	Xinglin Lu <i>China University of Geosciences, Beijing</i>	Characterizing Crack Wall Using GPR Attribute Technology for the Dengfeng Guanxingtai Observatory, China

## Conference schedule

17:00-17:15	Yan Wang <i>Jilin University</i>	Improvement of Target Detection Based on GPR Antenna-target Polarization Method
<b>Session 6: Poster Presentation (14:00-17:00)      Conference Room III --- Shunshui Hall (4th Floor)</b>		
<b>Co-Chairs: Jiulong Cheng, Rongyi Qian</b>		
1	Zhenlong Hou <i>Northeastern University</i>	A New Fast Forward Modeling Algorithm for Gravity Anomaly of Prism
2	Wangpeng Ma <i>East China University of Technology</i>	Design and Application of AEMT Capacitive Sensing Device
3	Qiyang Li <i>East China University of Technology</i>	A Two-dimensional Inversion of AEMT Data
4	Longfu Yang <i>East China University of Technology</i>	Power Spectrum Analysis of AEMT Data
5	Jun Liu <i>Chang'an University</i>	Application of the Rayleigh Wave Inversion with Fundamental and Higher Modes to Shallow Geological Mapping in Inner Mongolia, China
6	Cunlei Li <i>Liaoning Shihua University</i>	Evaluating the Classification of Low Permeability Glutenite Reservoir with Logging Analysis
7	Zuzhi Hu <i>BGP Inc., China National Petroleum Corporation</i>	3D Conjugate Gradients Cascade Inversion of MT Data in the Exploration of Gravel Layer
8	Chong Yi <i>China University of Geosciences, Wuhan</i>	Seismic Forward Modeling in Cylindrical Coordinates Based on Tunnel Model
9	Yue Liang <i>North China University of Water Resources and Electric Power</i>	An Improved Method of HHT in the Seismic Signal Processing
10	Xianxiang Wang <i>East China Institute of Technology</i>	Using M Pseudo-random Sequence to Get Noise-free Electromagnetic Data
11	Fei Zhou <i>Jilin University</i>	Application of Improved Adaptive Median Filtering in Denoising Deep Sea Near-bottom Magnetic Data
12	Meiling Sun <i>Exploration &amp; Development Research Institute of Liaohe Oilfield Company</i>	Research and Application of Cluster Storage in Seismic Data Process
13	Ruyun Tian <i>Jilin University</i>	The Application of MOGA in the Leaked Wave of Microtremor Exploration

## Conference schedule

<b>Wednesday, June 13, 2018</b>		
<b>Session 7: Electromagnetic Methods I</b>		<b>Conference Room I --- Yangming Hall (4th Floor)</b>
<b>Co-Chairs: Max Moorkamp, Jingtian Tang, Shucai Liu</b>		
<b>8:30-9:00</b>	<b>Max Moorkamp</b> <i>University of Leicester</i> <i>(Invited Speaker)</i>	<b>Imaging the Subsurface with Integrated Inversion Approaches-an Overview</b>
9:00-9:15	Weiqliang Liu <i>Chinese Academy of Geological Sciences, Beijing</i>	Anti-interference Data Processing Method for Large-scale Full Waveform Distributed Induced Polarization Exploration
9:15-9:30	Wentao Liu <i>Chang'an university</i>	3-D Grounded Electrical Source Airborne Transient Electromagnetic Modelling Using Mimetic Finite Volume and Rational Krylov Subspace Method
9:30-9:45	Ya'nán Fan <i>Chang'an University</i>	Application of Transient Electromagnetic Method to Detect Buried Low Resistivity Anomaly in Shallow Sea
9:45-10:00	Jun Tu <i>Chengdu University of Technology</i>	Thin Layer Identification Improved by Constrained Inversion of Magnetotelluric Data
10:00-10:30	<b>Tea and coffee break</b>	
10:30-10:45	Lun Li <i>Chengdu University of Technology</i>	IP Effect in Grounded-wire Transient Electromagnetic Data
10:45-11:00	Zenghu Ma <i>Northwest Institute of Nuclear Technology</i>	Full-zone Apparent Resistivity for Loop Source TEM Based on Vertical Component of Magnetic Field
11:00-11:15	Pengzhou Yu <i>East China University of Science and Technology</i>	2.5D Inversion of Surface and Borehole Multi-electrode DC Data Using Unstructured Mesh
11:15-11:30	Sidi Ma <i>Zhejiang University</i>	Research on Zero Mutual Inductance Overlapped Loop Transient Electromagnetic Device
<b>Session 8: Resource Exploration Geophysics</b>		<b>Conference Room II --- Lizhou Hall (4th Floor)</b>
<b>Co-Chairs: Zhenming Wang, Gang Tian</b>		
<b>8:30-9:00</b>	<b>Zhenming Wang</b> <i>University of Kentucky</i> <i>(Invited Speaker)</i>	<b>SH-Wave Refraction and Its Application in the Near-Surface Geologic Mapping in Owensboro Area, Kentucky, USA</b>
9:00-9:15	Weilin Li <i>Chengdu University of Technology</i>	Using Electric-source Ground-airborne Transient Electromagnetic System on Nanjiang Graphite Mining Area
9:15-9:30	Qin Li <i>Xi'an University of Science and Technology</i>	Thin-bed Reflectivity in Anisotropic Media
9:30-9:45	Yunsheng Zhao <i>Zhejiang University</i>	Experimental Research on Archie's Parameters at Different Frequencies
9:45-10:00	Zhuo Liu <i>Jilin University</i>	Calculation of Curie Depth by Magnetic Anomalies in Songliao Basin Using a New Algorithm Constrained by Variable Susceptibility Based on Dual Magnetic Interface Model
10:00-10:30	<b>Tea and coffee break</b>	

## Conference schedule

10:30-10:45	Fengdan Yu <i>Xi'an Center of Geological Survey</i>	Apply the Three-dimensional Induced Polarization Method in Hongliugou Mining Area, NW China
10:45-11:00	Meiling Zhang <i>Northeast Petroleum University</i>	Research on the Comprehensive Utilization of Geophysical History Data to Achieve High Definition Prediction of the Remaining Oil
11:00-11:15	Bangmin Sun <i>Zhejiang University</i>	Curie Point Depth from Spectral Analysis of Aeromagnetic Data in Northeast China
11:15-11:30	Senqing Hu <i>Shanghai Branch of China National Offshore Oil Corporation Limited</i>	Gravity and Magnetic Exploration in the Application of Environmental and Engineering Geophysics
<b>Session 9: Potential Field Inversion</b>		<b>Conference Room III --- Shunshui Hall (4th Floor)</b>
<b>Co-Chairs: Kamini Singha, Jianxin Liu</b>		
8:30-8:45	Yao Luo <i>National University of Defense Technology</i>	Multi-parameter Joint Transformations of Potential Field and Application to Gravity Gradiometry Processing
8:45-9:00	Siyuan Sun <i>Jilin University</i>	Three-dimensional Gravity Forward and Inverse Modeling Based on the Discrete Wavelet Transform
9:00-9:15	Yuanyuan Niu <i>China University of Geosciences, Beijing</i>	Estimation of Near-surface Density Based on Gravity Bayesian Analysis
9:15-9:30	Xiuhe Gao <i>Jilin University</i>	Analysis of the Depth Weighting Function in Gravity Inversion
9:30-9:45	Simin Zhao <i>Jilin University</i>	Joint Inversion of Gravity and Magnetic Data Based on Cross-gradient Function
9:45-10:00	Wenna Zhou <i>Lanzhou University</i>	Comparison of Depth Estimation Methods Based on Normalized Full Gradient and Continued Fraction
10:00-10:30	<b>Tea and coffee break</b>	
10:30-10:45	Jianan Shi <i>Jilin University</i>	Uncertainty Analysis of Gravity Data Inversion
10:45-11:00	Yiyuan Zhong <i>Central South University</i>	Global Gravity Modeling Using Tesseroids and 2D Gaussian Quadrature Rule
11:00-11:15	Mo Liu <i>China University of Geosciences, Beijing</i>	3D Density Interface Inversion with Lateral Density Constraint
11:15-11:30	Yatong Cui <i>China University of Geosciences, Beijing</i>	Rapid 3-D Inversion of Multi-parameter Magnetic Data in the Wavenumber Domain
<b>Session 10: Electromagnetic Methods II</b>		<b>Conference Room I --- Yangming Hall (4th Floor)</b>
<b>Co-Chairs: Larose Eric, Xiu Li</b>		
14:00-14:15	Dongyang Hou <i>Institute of Geology and Geophysics, Chinese Academy of Sciences</i>	On the Near Field Error of Controlled-source Electromagnetic Response in Frequency Domain

## Conference schedule

14:15-14:30	Guy Jutras <i>Geophex Ltd.</i>	Application of Portable Multi-Frequency Electromagnetic Systems in the Field of Environmental Engineering Exploration
14:30-14:45	Xinyu Wang <i>Yangtze University</i>	Three-dimensional Topographic Responses in Magnetotelluric Modeling using Comsol Multiphysics
14:45-15:00	Xiaodong Yu <i>Chengdu University of Technology</i>	Multi-model Parameter Constraints Inversion of Airborne Time-domain Electromagnetic Data Based on Regularization Strategy
15:00-15:15	Han Zhao <i>Chang'an University</i>	Research on the 1-D Inversion Method of Ground-airborne TEM with Multi-radiation Source
15:15-15:30	Guang Li <i>Central South University</i>	De-noising the Data from Wide Field Electromagnetic Method
15:30-16:00	<b>Tea and coffee break</b>	
16:00-16:15	Jianmei Zhou <i>Chang'an University</i>	3D Multi-frequency CSEM Modelling Using Rational Krylov Method
16:15-16:30	Hang Chen <i>Central South University</i>	Statistic Properties for Impedance Estimation of MT Data with Noise Using the Robust Method
16:30-16:45	Zhiyong Zhang <i>East China University of Science and Technology</i>	Two-dimensional AMT Inversion Considering Resistivity and Magnetic Permittivity
16:45-17:00	Jiayue Gu <i>Jilin University</i>	Spike Noise Reduction Method of Electrical Source Time-domain Ground-airborne Electromagnetic Data Based on Stationary Wavelet Transform
<b>Session 11: Signal Processing in Geophysics I      Conference Room II --- Lizhou Hall (4th Floor)</b>		
<b>Co-Chairs: Tatiana Selivanova, Xuben Wang</b>		
<b>14:00-14:30</b>	<b>Tatiana Selivanova</b> <i>Far Eastern Federal University</i> <b>(Invited Speaker)</b>	<b>Petro-magnetic Model of Combusting Area in Underground Coal Thermo-chemical Processing</b>
14:30-14:45	Guochao Wu <i>Zhejiang University</i>	Airborne Geophysical Interpretation of the Gamburtsev Subglacial Mountains, East Antarctica
14:45-15:00	Xinjun Li <i>Northwest Institute of Nuclear Technology</i>	The Oblateness of Planets in the Model of Hydrostatics and Elastic
15:00-15:15	Cuifang Wang <i>Earthquake Administration of Sichuan Province</i>	A New Digital Seismograph with an Improved Accuracy Transfer Function
15:15-15:30	Wenke Zhao <i>Zhejiang University</i>	Defining Archaeological Features with ERT at the Hepu Han Tombs, China
15:30-16:00	<b>Tea and coffee break</b>	
16:00-16:15	Haifu Sun <i>Hengda Century Geophysics Technology Co., Ltd</i>	The Application of the New Technology of Environmental Engineering Geophysics

## Conference schedule

16:15-16:30	Yu Liu <i>Zhejiang University</i>	Broadband Constrained Inversion of Common Offset GPR Data Using Prior Information from Well Log
16:30-16:45	Tianxiang Yu <i>Zhejiang University</i>	Investigation of Large-scale Mausoleum Using Integrated Geophysical Technologies in the Huangfen Mountain of Hangzhou, China
16:45-17:00	Yi Zhong <i>Zhejiang University</i>	Integrated Geo-archaeological Surveys for Buried Cultural Relics in Kizil Grottoes, NW China
<b>Session 12: Signal Processing in Geophysics II      Conference Room III --- Shunshui Hall (4th Floor)</b>		
<b>Co-Chairs: Zhelei Xia, Jingyu Hua</b>		
14:10-14:20	Hao Liu <i>Zhejiang Gongshang University</i>	Local Pauli Inequivalence of Five Qubit Hypergraph States
14:20-14:30	Xinlong Hong <i>Hangzhou Dianzi University</i>	Relay-assisted Information and Power Transfer Protocol Based on Time Switching Structure in SWIPT
14:30-14:40	Xiaxia Guo <i>Zhejiang University of Technology</i>	Analysis of Doppler Shift Estimator Based on Level Crossing Rate
14:40-14:50	Fei Liu <i>Zhejiang University of Technology</i>	The Application of Genetic Algorithm in the Design of FIR Filter
14:50-15:00	Jiang Liu <i>Hangzhou Dianzi University</i>	A Sparse Reconstruction-based Face Recognition Method with Single Sample per Person
15:00-15:15	<b>Tea and coffee break</b>	
15:15-15:25	Zhengjun Ni <i>China Jiliang University</i>	An Improvement Study of Apriori Algorithm Based on Fp-tree
15:25-15:35	Jiajun Wen <i>Hangzhou Dianzi University</i>	Application of Nano materials in the Detection of Exosome
15:35-15:45	Hong Cao <i>Hangzhou Dianzi University</i>	Generalized Rotation Measurement Matrix and Its Application in Underwater Echo Signals
15:45-15:55	Song Liu <i>Hangzhou Dianzi University</i>	Asynchronous Multi-sensor Fusion Multi-target Tracking Algorithm
15:55-16:05	Qinwei Yao <i>Hangzhou Dianzi University</i>	A Training Method of Generation Adversarial Nets Based on Feedback Regulation
16:05-16:15	Huazhong Ji <i>Zhejiang University</i>	Research on Direction-of-Arrival Estimation Using a Coprime Array