

#### Wednesday, 16 May

# Workshop on the Challenges of the Continental Earthquake Science Experiments (CESES): Science, Technology and Coordination

Session 1: Role of basic research in seismic hazard assessment and operational earthquake forecast

Time: 08:30-12:00

Venue: Meeting Room 506 (5th Floor)

Chairman: Qinjian TIAN, Aleksei ZAVIALOV

08:30-09:00 Opening: Address from the leader of the Earthquake Monitoring and Forecasting

Department of China Earthquake Administration (CEA) and Director of Institute of

Earthquake Forecasting (IEF)

09:00-09:20 **John E. VIDALE** SCEC and the science of earthquake forecasts

09:20-09:40 **Fei PENG** Brief introduction to the Institute of Earthquake Forecasting, China Earthquake Administration

09:40-10:00 **Giuliano PANZA** How seismological and geodetic tools can jointly contribute to the understanding and forecasting of earthquakes

10:00-10:40 Coffee Break

Chairman: Bing XUE, Bruce E. SHAW

10:40-11:00 **Guojie MENG** Introduction to the Scientific Project of Earthquake Anatomy

11:00-11:20 **Yosuke AOKI** Adaptive meshing of a fault plane for an inversion of coseismic displacements for slip distribution

11:20-11:40 Weijun WANG Earthquake Anatomy: An exercise from 2017 Jinghe M6.6 Earthquake

11:40-12:00 **Aleksei ZAVIALOV** Effect of round-the-world surface seismic waves in the dynamics of repeated shocks of strong earthquakes - statistical properties

12:00-13:30 Lunch



### Wednesday, 16 May

#### Session 2: Field experiments in earthquake science: experiences and lessons

Time: 13:30-17:30

Venue: Meeting Room 506 (5th Floor)

Chairman: Jinwei REN, John E. VIDALE

13:30-13:50 Yifeng CUI High performance earthquake simulation: challenges and opportunities

13:50-14:10 Guangyu FU Introduction to the China Earthquake Science Experiment Fields

14:10-14:30 Bruce E. SHAW Physics-based Earthquake Simulator

14:30-14:50 Peng WANG USYERF versus UCERF: status and prospect

14:50-15:40 Coffee Break

Chairman: Guojie MENG, Yifeng CUI

15:40-16:00 Yosihiko OGATA Toward probability forecasting of large earthquakes

16:00-16:20 **Ying LI** Operational earthquake forecasting in the Continental Earthquake Science Experiments

16:20-16:40 **Bogdan Dumitru ENESCU** Earthquake triggering and interaction, based on study-cases in Japan

16:40-17:00 **Gareth J FUNNING** Tectonic geodesy research in California: interseismic deformation, fault creep and earthquake response

17:00-17:30 Closing: Address from the leader of the Science and Technology Department of CEA



#### Wednesday, 16 May



SCEC and the science of earthquake forecasts

John E. VIDALE

Southern California Earthquake Center/University
of Southern California

Dean's Professor at USC and the Director of
the Southern California Earthquake Center

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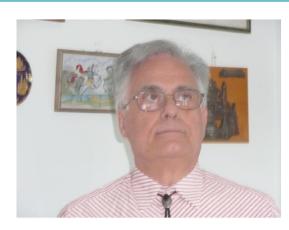
Brief introduction to the Institute of
Earthquake Forecasting, China
Earthquake Administration
Fei PENG
Institute of Earthquake Forecasting,
China Earthquake Administration
Director of the Foreign Affairs Office of IEF

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NSTITUTE OF EARTHQUAKE FORECASTING, CE



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How seismological and geodetic tools can jointly contribute to the understanding and forecasting of earthquakes

Giuliano PANZA
University of Trieste
OLIM Professor of Seismology

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Introduction to the Scientific Project of Earthquake Anatomy Guojie MENG

Institute of Earthquake Forecasting, China Earthquake Administration Director of the Earthquake Deformation Laboratory of IEF

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Adaptive meshing of a fault plane for an inversion of coseismic displacements for slip distribution Yosuke AOKI

Earthquake Research Institute, University of Tokyo Assistant Professor

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Earthquake Anatomy: An exercise from 2017 Jinghe M6.6 Earthquake Weijun WANG

Institute of Earthquake Forecasting, China Earthquake Administration Director of the Seismology Laboratory of IEF

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#### Wednesday, 16 May



Effect of round-the-world surface seismic waves in the dynamics of repeated shocks of strong earthquakes - statistical properties

Aleksei ZAVIALOV

Schmidt Institute of Physics of the Earth,
Russian Academy of Sciences
Head of the Laboratory of Seismic Hazard, Schmidt Institute
of Physics of the Earth

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High performance earthquake simulation: challenges and opportunities

**Yifeng CUI** 

High Performance GeoComputing Laboratory, San Diego Supercomputer Center/ University of California San Diego Director of High Performance GeoComputing Laboratory

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#### Wednesday, 16 May



**Introduction to the China Earthquake Science Experiment Fields** 

Guangyu FU

Institute of Earthquake Forecasting, China Earthquake Administration Deputy Director of Earthquake Deformation Laboratory of IEF

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Physics-based Earthquake Simulator
Bruce E. SHAW
Lamont Doherty Earth Observatory, Columbia
University
Lamont Research Professor

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USYERF Status and Prospect
Peng WANG
Institute of Earthquake Forecasting,
China Earthquake Administration
Assistant Professor of Earthquake Prediction
Laboratory of IEF

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Toward probability forecasting of large earthquakes Yosihiko OGATA Institute of Statistical Mathematics Professor Emeritus

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#### Wednesday, 16 May



Operational earthquake forecasting in the Continental Earthquake Science Experiment Sites

**Ying LI** 

Institute of Earthquake Forecasting, China Earthquake Administration Director of Geochemistry Laboratory of IEF

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Earthquake Triggering and Interaction, based on study-cases in Japan

**Bogdan Dumitru ENESCU** 

Division of Earth and Planetary Sciences Graduate School of Science, Kyoto University Associate Professor

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## Wednesday, 16 May



Tectonic geodesy research in California: interseismic deformation, fault creep and earthquake response Gareth J FUNNING

University of California
Associate Professor and Undergraduate Advisor for
GeophysicsDepartment of Earth Sciences

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