

# 8th France-Taiwan Symposium in Earth Sciences

21-22 October 2019 - Pau, France

## Programme

### Monday 21 October

8:30 Introduction

*Coffee and viennoiserie*

#### **Plenary Session 1 - Rifting in South China Sea**

**9:30-9:45** - Constraints on the age and geodynamics of the South China Sea from the recent IODP Expeditions - Briais et al.

**9:45-10:00** - Geometry of the South China Sea at the end of rifting and at the end of spreading: Implications on rifting processes - Sibuet et al.

**10:00-10:15** - Spreading of the South China Sea basin and the Hainan plume - Hsu et al.

**10:15-10:30** - The South China Sea Rifting and V-shape Spreading: A discussion on forcing parameters - Sapin et al.

*Coffee break - Poster*

**10:50-11:05** - The crustal architecture of the western South China Sea and its implications on breakup and seafloor spreading - Chang et al.

**11:05-11:20** - Anisotropic Rayleigh-wave phase velocity maps of the Sunda Plate - Legendre et al.

**11:20-11:35** - Seismotectonic characteristics of the Taiwan collision-Manila subduction transition: The effect of pre-existing structures - Chin et al.

**11:35-11:50** - Detailed lithospheric structure of an arc-continent collision beneath Taiwan revealed by joint inversion of seismological and gravity data - Gautier et al.

*Lunch at your convenience at the Restaurant Belle Epoque inside Palais Beaumont or in Pau city center*

**14:00-14:15** - Tectono-sedimentary evolution in the offshore area of northern Taiwan - Nguyen et al.

**14:15-14:30** - Revisiting the controversies and debates over the tectonic models for the Taiwan mountain belt - Kuo et al.

**14:30-14:45** - Out-of-Sequence Thrusting in Central Range, Taiwan Orogenic Belt and its implication to mountain building process - Lee et al.

**14:45-15:00** - Strain partitioning and exhumation in oblique Taiwan collision: implications of rift architecture and plate kinematics - Conand et al.

**15:00-15:15** - Late Quaternary tectonic development, sedimentation and magmatic activities in an incipient backarc basin: An example from the Southern Okinawa Trough - Lin et al.

*Coffee break - Poster*

#### **Plenary Session 2 - Extreme events**

**15:35-15:50** - Geologic records and possible recurrence interval for tsunamigenic earthquake events along the Manila trench - Shyu et al.

**15:50-16:05** - Offshore « Sand Waves » of the Southwestern Taiwan: Sedimentologic or Landslide origin ? - Deffontaines et al.

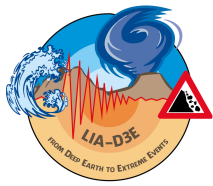
**16:05-16:20** - An environmental and climatic change from seabed erosion to deposition off SW Taiwan - Chen et al.

**16:20-16:35** - A biomarker stable isotope record of late Quaternary climate change in Southwestern Taiwan - Chang et al.

**16:35-16:50** - Projection of Summer Precipitation in Eastern China Using Self-Organizing Map, an artificial neural network - Li et al.

**16:50-17:05** - On the regional unconformity of the South Yung-An East Ridge as recognized by calcareous microfossil evidence - Wei et al.

Gala dinner at Domaine du Cinquau - transportation by bus



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## *Programme*

Tuesday 22 October

### **Plenary Session 2 - Extreme events (continued)**

- 09:00-09:15** - Do chemical indices of weathering reflect weathering? An inquiry from Taiwan - Garzanti et al.
- 09:15-09:30** - First results of EAGER Cruise: records of past extreme events in marine sediments around Taiwan - Babonneau et al.
- 09:30-09:45** - Sedimentary Records of Natural Hazards Offshore Eastern Taiwan - Su et al.
- 09:45-10:00** - Modern sedimentary records offshore eastern Taiwan - Chen et al.
- 10:00-10:15** - Extreme events recorded in sediment cores of the Hateruma forearc basin, southern Ryukyus (EAGER project – preliminary results) - Guerin et al.

*Coffee break - Poster*

### **Plenary Session 3 - Earthquakes and Deep/Earth Surface processes**

- 10:35-10:50** - Tracing erosion patterns in Taiwan by sediment composition - Resentini et al.
- 10:50-11:05** - How landscapes respond to earthquakes over several seismic cycles: results from a reduced-complexity model - Steer et al.
- 11:05-11:20** - Relief building in Taiwan: Insights from in situ produced cosmogenic nuclides - Siame et al.
- 11:20-11:35** - How to reconcile OSL and TCN data: the potential of high resolution sampling on the Choushui Tableland (West Central Taiwan) - Lebrun et al.
- 11:35-11:50** - Neotectonics of the Hengchun Fault (S.Taiwan) - Deffontaines et al.
- 11:50-12:05** - New evidences for active folding in the coastal plain of SW Taiwan from Sentinel-1 InSAR - Pathier et al.

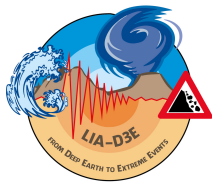
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- 14:00-14:15** - Sentinel-1 Radiometric Terrain Correction (RTC) - Ng et al.
- 14:15-14:30** - The challenge of "strong" ground-shaking prediction - Cotton et al.
- 14:30-14:45** - Kinematics and dynamic modeling of current and past earthquakes in Taiwan: implication to multiple fault segments rupture and seismic hazard analysis - Ma et al.
- 14:45-15:00** - Effect of fault heterogeneity on seismic rupture dynamics : an experimental approach - Latour et al.
- 15:00-15:15** - Co-Seismic Focal Mechanism of Chichi Earthquake (1999,  $M_w$  7.6) Deduced from Gouge Magnetic Fabric - Chou et al.
- 15:15-15:30** - GPS horizontal displacements and surface deformation during earthquake cycle in the northernmost longitudinal valley, eastern Taiwan - Lee et al.

*Coffee break - Poster*

- 15:50-16:05** - Micro-XRF-core scanning in the studies of event deposits: opportunities and challenges - Huang et al.
- 16:05-16:20** - Interaction of stress- and fluid-driven seismicity in the 2013 M 5.87 earthquake sequence of northern Taiwan - Rau et al.
- 16:20-16:35** - Strong lateral variations of seismic attenuation properties in the crust of Taiwan - Margerin et al.
- 16:35-16:50** - What Does Space Geodesy Say About LLSVP (Large Low-Shear-Velocity Provinces) ? - Chao et al.
- 16:50-17:05** - Analysis of the high frequency harmonic signal recorded by the MACHO submarine cable observatory - Lin et al.

Discussions and conclusion



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## *Poster Programme*

### All day

- Probing fault slip behaviors along the southern Ryukyu and Manila subduction zones using seafloor geodesy - Hsu et al.
- Mixed paleoclimatic and paleoseismic record revealed by turbidites offshore eastern Taiwan over the last 1800yrs? - Revel et al.
- Near-surface anisotropic velocity changes induced by the 2004 and subsequent large Sumatra earthquakes - Yu et al.
- Coseismic Source Model of the 2017  $M_w$  6.7 Surigao Earthquake, Philippines base on GPS and DInSAR - Ching et al.
- Structural and Stratigraphic Records in the Huatung Basin Offshore of East Taiwan - Hsu et al.
- New evidences for active folding in the coastal plain of SW Taiwan from Sentinel-1 InSAR - Pathier et al.
- Deformation Partitioning in Mountain Belts, insights from analogue modeling experiments and the Taiwan collisional orogen - Malavieille et al.
- Hydroacoustic observations of long-range sound propagation in the northern South China Sea - Chen et al.
- Radiocarbon indication of organic carbon transportation from the rivers of eastern Taiwan to the seafloor - Wang et al.
- Time-lapse elastic properties of cracked granite during deformation inferred from laboratory experiments using waveform modelling - Lai et al.
- Gas emission characteristics and its tectonic implication in southern-most Okinawa Trough from split-beam echo souder observations - Lin et al.
- Near-surface anisotropic velocity changes induced by the 2004 and subsequent large Sumatra earthquakes - Yu et al.
- Monitoring the Surface Deformation of Slow-Moving Deep-Seated Landslides Using GPS and Interferometric Analysis of Satellite Radar Images - Lin et al.
- Using multi-temporal interferometry to recognize sliding blocks with in deep-seated landslide by ALOS/ALOS2 imagery - Chen et al.