



ERI-IPGP Workshop – October 2nd -4th, 2019
 Université de Paris, Institut de physique du globe de Paris

WG1: Earthquake and environmental seismology (Shingo Watada, ???)

WG2: Volcanoes (Mie Ichihara, Patrick Allard)

WG3: Global Geophysics (Takashi Iidaka, Nobuaki Fuji)

WG4: Innovative Observations (Ryuichi Nishiyama, Pascal Bernard or Jean-Marie Saurel???)

	Wednesday	Thursday	Friday
Morning	<i>P07 (Outremer)</i>	<i>Room 310</i>	<i>Room 108</i>
Lunch	<i>Cafeteria 6th floor</i>	<i>Cafeteria 6th floor</i>	<i>Cafeteria 6th floor</i>
Afternoon	<i>P07 (Outremer)</i>	<i>Room 310</i>	<i>Free time (Room 108 booked in case)</i>
Dinner	<i>Buffet @ Médiathèque + Concert (poster session)</i>	<i>Joint dinner (restaurant) Students-Postdocs all together somewhere else</i>	<i>Free evening Friday beer</i>

Wednesday, October 2nd: Day 1

08:30 - 09:00
09:00 - 09:15

Reception
Introduction and welcome talks (ERI & IPGP) – Chaussidon/Montagner & Masa Kinoshita

Session WG1: Earthquake and environmental seismology

Chair: Shingo Watada, Claudio Satriano

- 09:15 - 09:30** **Mariano Supino:** *The regular scaling of low-frequency earthquakes*
- 09:30 - 09:45** **Shingo Watada:** *The 2018 Kurakatau tsunami*
- 09:45 - 10:00** **Martin Vallée:** *Multiple seismological observations and modeling of the prompt elasto-gravity signals*
- 10:00 - 10:15** **Kiwamu Nishida:** *Source locations of body wave microseisms*
- 10:15 - 10:30** **Éléonore Stutzmann:** *Blind Source Separation of Temporally Independent Microseisms*
- 10:30 - 11:10** **Coffee/Tea Break**
- 11:10 - 11:25** **Zack Spica:** *Extracting Geotechnical information in an urban environment using distributed acoustic sensing*
- 11:25 - 11:40** **Natalia Poiata:** *Space-time characterisation of low-frequency earthquakes activity in western Shikoku from analysis of continuous seismic data*
- 11:40 - 11:55** **Tomoya Takano:** *Structural monitoring using seismic interferometry*
- 11:55 - 12:10** **Claudio Satriano:** *Rupture process of the Mw 3.3 earthquake in the St. Gallen 2013 geothermal reservoir, Switzerland*
- 12:10 - 12:25** **Kevin Juhel:** *Prompt gravity signals recorded by future gravity strainmeters and application to earthquake early warning*
- 12:25 - 12:40** **Jean-Paul Montagner:** *Porosity wave at Mount Fuji from ambient noise anisotropy.*
- 12:40 – 13:55** **Lunch**

Session WG2: Volcanoes

Chair: Mie Ichihara, Patrick Allard

- 13:55 - 14:10** **Nikolai Shapiro:** *Seismological studies of Kamchatka volcanoes*
- 14:10 - 14:25** **Patrick Allard:** *Source depth of Strombolian explosive activity at Yasur volcano, Vanuatu: insight from compositional gas changes and co-seismic signals*
- 14:25 - 14:40** **Mie Ichihara:** *Variable relations between magma discharge rate and eruption signals in infrasound*
- 14:40 - 14:55** **Anne Mangeney:** *Quantification of physical processes at the source of seismic waves generated by granular flows from laboratory-scale experiments.*
- 14:55 - 15:10** **Yujiro Suzuki:** *New scaling law for the Vulcanian-type volcanic eruption*
- 15:10 - 15:25** **Guillaume Carazzo:** *How did strong wind prevent total collapse of powerful Plinian eruptions: the examples of the 1815 Tambora, 1985 Nevado del Ruiz and 1991 Pinatubo eruptions*
- 15:25 - 16:00** **Coffee/Tea Break**
- 16:00 - 16:15** **Yosuke Aoki:** *Thermoelastic deflation of active volcanoes as imaged from synthetic aperture radar*
- 16:15 - 16:30** **Giulia Del Manzo:** *Eruptive history of Lesser Antilles volcanic arc and the impact of volcanism on marine environment : what can be learnt from Martinique?*
- 16:30 - 16:45** **László Oláh:** *High-definition and low-noise muography of the Sakurajima volcano with gaseous tracking detectors*
- 16:45 - 17:00** **Fabio Manta:** *Correlation between GNSS-TEC and eruption magnitude supports the use of ionospheric sensing to complement volcanic hazard assessment*
- 17:00 - 17:15** **Jean-Philippe Métaxian:** *Machine learning applied to volcanic earthquakes analysis: A case study on the Ubinas volcano, Peru*
- 17:15 - 17:30** **Sylvie Vergnolle:** *Insights on temporal activity at Yasur volcano (Vanuatu) from simultaneous seismic and infrasonic records*
- 17:30 - 17:45** **Jean-Christophe Komorowski:** *The hazards of hydrothermal and phreatic explosions at*

La Soufrière de Guadeloupe: insights from historical events, computer simulations and the current unrest

17:45 – 18:00 **Presentation Poster (2 min each)**
18:00 – 20:30 **Reception (with PhiloGaïa Orchestra and posters)**

Thursday, October 3rd: Day 2

Session WG3: Global Geophysics

Chair: Takashi Iidaka, Nobuaki Fuji

09:10 - 09:25 **Taichi Kawamura/Philippe Lognonné:** From Mars with NASA InSight to the Moon with JAXA Lunar Polar Lander

09:25 - 09:40 **Hitoshi Kawakatsu:** *Structure of inner core (TBD)*

09:40 - 09:55 **Nathalie Feuillet:** *Megathrust seismic cycles at the Ryukyu trench: insight from micro atoll corals*

09:55 - 10:10 **Takashi Iidaka:** *Lateral variation of the reflected wave amplitude from the subducting Philippine Sea plate*

10:10 - 10:25 **Nobuaki Fuji:** *A roll-over slab geometry revealed beneath the Caroline Plate*

10:25 - 10:40 **Vincent Lesur:** *Modelling the Earth core magnetic field: a Japanese-French IGRF candidate*

10:40 – 11:05 **Coffee/Tea Break**

11:05 - 11:20 **Guilhem Barruol:** *Plume-lithosphere interaction beneath the Indian Ocean*

11:20 - 11:35 **Kiyoshi Baba:** *Upper mantle electrical conductivity beneath the northwestern Pacific*

11:35 - 11:50 **Mathurin Wamba:** *Seismic imaging of mantle plumes beneath la Réunion hotspot by waveform inversion*

11:50 - 12:05 **François Petrelis:** *Effects of tides on earthquakes: a theoretical study*

12:05 - 12:20 **Satish Singh:** *Imaging of the Lithosphere-Asthenosphere Boundary using active source seismology.*

12:20 - 12:35 **Hikaru Iwamori:** *Mantle geochemical structure and top-down hemispherical dynamics of the Earth*

12:35 - 12:50 **Jérôme Dymont:** *Magnetic anomalies before and after subduction: the Japan Trench*

12:50 – 14:30 **Lunch (posters)**

Session WG4: Innovative Observations

Chair: Ryuichi Nishiyama, Pascal Bernard or Jean-Marie Saurel???

14:30 - 14:45 **Masanao Shinohara:** *OBS*

14:45 - 15:00 **Pascal Bernard:** *Onland and offshore high resolution optical seismometers at the end of long, plurikilometric fibers*

15:00 - 15:15 **Masataka Kinoshita:** *IODP Nankai Trough Seismogenic Zone Drilling – Achievements and Lessons-*

15:15 - 15:30 **Wayne Crawford:** *Seafloor measurements of the 2018-19 Mayotte seismo-volcanic crisis*

15:30 - 16:10 **Coffee/Tea Break**

16:10 - 16:25 **Sébastien De Raucourt:** *Planetary seismic station: from Mars to the Moon*

16:25 - 16:40 **Ryuichi Nishiyama:** *Joint inversion of gravimetry and muography data for the internal structures of mountains (volcanoes and glaciers)*

16:40 - 17:05	Masataka Kinoshita, Koji Miyakawa, Natsumi Hokanishi, Kenji Satake: <i>Introduction to ERI technical support</i>
17:20 - 20:00	Poster Session
20:00	Dinner Researchers & Student Night

Friday, October 4: Day 3

9:00 - 10:00 General Discussion animated by the WG Chairs & Conveners.

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Chair: Mie Ichihara, Patrick Allard

WG3: Global Geophysics

Chair: Takashi Iidaka, Nobuaki Fuji

WG4: Innovative Observations

Chair: Ryuichi Nishiyama, ???

Conveners

Jean-Paul Montagner, Masa Kinoshita

10:30 - 11:30 Meeting of WG and first draft-rapport redaction

11:30 - 12:00 Final Discussion, Conclusion, Perspectives

Adjourn

LIST OF POSTERS (To be completed)

Wang Yuchen: *Tsunami Data Assimilation Approach in Disaster Mitigation*

Sophie Debaecker: N/D

Satoru Baba: *Comprehensive detection of very low frequency earthquakes off the Hokkaido and Tohoku Pacific coast, northeastern Japan*

Julian Eisenbeis: N/D

Atsuki Oba: *Early forecast of long-period ground motions based on data assimilation of observed ground motions and numerical simulation of seismic wave propagation*

Tristan Deleplanque: N/D

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