



ERI-IPGP Workshop – September 27 - 29, 2022
Earthquake Research Institute, the University of Tokyo

	Sep 27	Sep 28	Sep 29
Morning	#1 building, 2F seminar room	#1 building, 2F seminar room	#1 building, 2F seminar room
Lunch	UT cafeteria	UT cafeteria	UT cafeteria
Afternoon	#1 building, 2F seminar room	#1 building, 2F seminar room	(#1 building, 2F seminar room)
Poster	#1 building, 2F lounge	#1 building, 2F lounge	
Dinner			

Oral presentation: Please bring your own PC.

Poster size: A0 Portrait (84 x 119 cm) (Poster board size=120cm width x 150cm height)

Tuesday, September 27, 2022: Day 1

08:30 - 09:00 Reception

09:00 - 09:15 Introduction and welcome talks & logistics (ERI & IPGP)
 (Satake/Kinoshita/Montagner)

WG1 Innovative observation & data (Nishiyama / La Losq)

09:15-09:40 Jean-Philippe Métaixian: Strombolian seismic activity characterisation using fibre-optic cable and distributed acoustic sensing

09:40-10:05 Hajime Shiobara: Overview of ERI's ocean bottom seismic and geodetic measurements as the offline system

10:05-10:30 Takao Koyama: Geomagnetic survey using drones

10:30-10:40 Break

- 10:40-11:05 Charles Le Losq: Modeling the properties of magmas with machine learning
11:05-11:30 Laszlo Olah: Muography and machine learning

WG4 Global/local dynamics of Earth and planets (Takeuchi / Iidaka/ Fuji)

- 11:40-12:05 Kenji Kawai, Y. Suzuki, R. J. Geller: Imaging paleoslabs in D" beneath the northern Pacific based on high-resolution inversion of seismic waveforms for 3-D transversely isotropic structure
- 12:05-13:30 Lunch
- 13:30-13:55 Hikaru Iwamori: (Visualization of geofluid within crust/mantle)
13:55-14:20 Jean-Paul Montagner: Plume conduits and stagnant ponding zones beneath La Réunion hotspot
14:20-14:45 Yoshiya Usui, M. Uyeshima & M. Hata: (EM structure and fluids in subduction zone crust and mantle)
- 14:45-15:00 Break
- 15:00-15:25 Manabu Morishige: Prediction of the thermal structure of subduction zones including its uncertainty
15:25-15:50 Nozomi Takeuchi: Olivine fabrics constrained by Pn azimuthal anisotropy
15:50-16:15 Satish Singh: The Lithosphere-asthenosphere boundary and the Gutenberg discontinuity: The role of water, CO₂ and melt
- 16:15-16:40 Break
- 16:40-18:10 Poster core time 1
16:40-18:10 Lab tour (all IPGP participants)
OBS laboratory
Muography
Seismograph museum
High pressure /High temperature

Wednesday, September 28, 2022: Day 2

- 09:00-09:25 Nobuaki Fuji: Small-data seismology on the centimetric rock sample

WG2 Planetary, environment & earthquake planetary seismology (Nishida / Kawamura)

- 09:25-09:50 Taichi Kawamura: Challenge in Planetary Seismology: From Mars, Moon and towards Titan
09:50-10:15 Keisuke Onodera: Special topic (collaboration with IPGP Special Topic)
- 10:15-10:40 Break

10:40-11:05 Shingo Watada: Tonga eruption

WG3 Volcanology (Ichihara / Rosas-Carbajal)

11:05-11:40 Nathalie Feuillet: Birth of a giant submarine volcano offshore Mayotte (Comoros, Indian Ocean)

11:40-12:05 Claudio Satriano: Deciphering the very low frequency seismic signals from the Mayotte underwater volcano

12:05-13:30 Lunch

13:30-13:55 Yohei Yukutake: Harmonic tremor from the deep part of Hakone volcano and its physical model

13:55-14:20 Masaaki Morita: Detailed sequence of the 2021 eruption at Fukutoku Okanoba submarine volcano, Japan, constrained by sulfur dioxide flux monitored with TROPOMI

14:20-14:45 Marina Rosas-Carbajal: Volcano electrical tomography

14:45-15:00 Break

15:00-15:25 Franco Tapia: 2-D extensional experiment on granular suspension: Physical model of magma fracturing

15:25-15:50 Fidel Costa: The variety of volcanic plumbing systems

15:50-16:10 Break

16:10-18:00 Poster core time 2
(Executive meeting if needed)

Thursday, September 29, 2022: Day 3

09:00-11:00 Breakout session

11:00-12:00 Wrapup & Conclusion

12:00 Adjourn

POSTER

Poster size: A0 Portrait (Poster board size=120cm width x 150cm height)

WG1

- P-1 Arnaud Lemarchand: Rapid Response Ocean Bottom Seismometer. Device feature: Mechanical structure and Open source datalogger;
- P-2 Arnaud Lemarchand: Multidisciplinary Sub-marine network observatory at Mayotte;
- P-3 Arnaud Lemarchand: Development of innovative, high resolution optical seismometers and strainmeters at the termination of long fibers: recent applications on volcanoes and on ocean bottom
- P-4 Rie Nakata, Masataka Kinoshita*, Yoshitaka Hashimoto, Yohei Hamada: Drilling and monitoring in Hyuga-Nada: Unveiling effects of ridge subduction on slow earthquakes
- P-5 Masanao Shinohara, Tomoaki Yamada, Takeshi Akuhara, Kimihiro Mochizuki & Shin'ichi Sakai: Simultaneous seafloor seismic observation using distributed acoustic sensing and cabled accelerometer off Sanriku, Japan
- P-6 Akito Araya, development of portable absolute gravimeters
- P-7 Ryuichi Nishiyama: Hydrology using cosmic-ray electromagnetic particles
- P-8 Seigo Miyamoto: Multi-directional muography of the Izu-Omuroyama scoria cone
- P-18 Akimichi Taketa: Neutrino Oscillation Tomography of the Earth

WG2

- P-9 Shota Kato (D2) Extraction of P-s converted wave from secondary microseisms
- P-10 Elvira Astafyeva: planetology, Ionospheric effects of the 15 January 2022 explosive eruption of the Hunga Tonga volcano
- P-11 Taiga Seito (M2): TEC induced by the 15 January 2022 explosive eruption of the Hunga Tonga volcano)
- P-12 Kiwamu Nishida: P-wave microseisms
- P-19 Nathalie Feuillet: Microatolls studies in the Ryukyus: implication for the Holocene seismic cycle of the megathrust

WG3

- P-13 Claudia Sanchez: Bubble bursting and acoustics in the lab
- P-14 Dan Muramatsu: Bubble bursting and acoustics in the field
- P-15 Maki Hata: Electro-magnetic structure and volcanism at subduction
- P-16 Marc Benedetti: Nanoparticles and volcanoes

WG4

- P-17 Takashi Iidaka: (Seismicity and fluids in subduction zone crust and mantle)

Participants from IPGP

- *Elvira Astafyeva, planetology
- *Marc Benedetti, biogeochemistry
- *Fidel Costa, volcanology

*Nathalie Feuillet, marine geosciences
*Nobuaki Fuji, seismology
*Taichi Kawamura, planetology
*Charles Le Losq, geomaterial, data science
*Arnaud Lemarchand, engineer
*Jean-Philippe Métaxian, seismology/volcanology
*Jean-Paul Montagner, seismology
*Marina Rosas-Carbajal, volcanology
*Claudio Satriano, seismology
*Satish Singh
Adèle Doucet, seismology (M2 @ ERI)

Dinner Places candidates (for small groups only)

Nezu

Kuruma-Ya 車屋 <https://tabelog.com/tokyo/A1311/A131106/13020753/>



Han-tei はん亭 <https://www.hotpepper.jp/strJ000103363/>



Suzuki すずき

Matsuyoshi 松好 <https://tabelog.com/tokyo/A1311/A131106/13008474/>



Todai-Mae
Oguchi おぐち <https://oguchi.net/>



Hongo Street
Miyamoto 宮本 <http://www1.tcn-catv.ne.jp/fc-miya/>

