14 to 16 December - Online

Opening Science

A challenge for geosciences and astrophysics

Session 1

OPENING SCIENCE: HOW AND WHY

Session 2

SHARING DATA AND TOOLS

Session 3

PARTICIPATORY SCIENCE: CITIZENS AT THE HEART OF SCIENCE

INFORMATION & REGISTRATION



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Monday, 14 December

Session 1 Ouvrir la Science : comment et pourquoi ? (in French)

14:50	Beginning of the Session
15:00	<i>Introduction</i> (15 min) Marc Chaussidon, director of the IPGP & director of the LabEx UnivEarthS Anne Lemière, researcher at the APC laboratory
15:15	<i>La nécessité d'une Science ouverte: un aperçu historique (45 min)</i> Elise Lehoux , Bibliothèque d'Université de Paris
16:00	Open Data in Earth, Planets and Universe Sciences: State of Art and Challenges (45 min) Aude Chambodut , EOST (Université de Strasbourg / CNRS)
16:45	Se lancer dans la Science Ouverte (45 min) Joanna Janik, DDOR-CNRS

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Tuesday, 15 December

Session 2 Sharing data and tools (in English)

14:50	Beginning of the Session
15:00	<i>Gravitational Wave: Open Data from Virgo and LIGO Collaborations (30 min)</i> Agata Trovato, APC (Université de Paris / CNRS / CEA)
15:30	Gammapy: An open tool for gamma-ray and multi-messenger astronomy (30 min) Régis Terrier , APC (Université de Paris / CNRS / CEA)
16:00	DATA TERRA: An infrastructure for Earth-system data and services (30 min) Frédéric Huynh , DATA TERRA
16:30	Break
16:45	ESCAPE: An European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures (30 min) Catherine Boisson, LUTH (Observatoire de Paris / Université de Paris / CNRS)
17:15	<i>Fink: the transient sky from the Rubin/LSST alert stream (30 min)</i> Julien Peloton, IJCLab (Université Paris-Saclay / CNRS)
17:45	<i>Round table: Open-data and unpredictable events</i> (45 min) Matteo Barsuglia, APC (Université de Paris / CNRS / CEA) Eric Chassande-Mottin, APC (Université de Paris / CNRS / CEA) Jérôme Gaillardet, IPGP (Université de Paris / CNRS)

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Wednesday, 16 December

Session 3 Participatory science: citizens at the heart of Science

(in English)

14:50	Beginning of the Session
15:00	Belisama: taking part of the TARANIS mission (30 min) Philippe Laurent , APC (Université de Paris / CNRS / CEA)
15:30	LastQuake: An app for citizen sismology (30 min) Rémy Bossu, CSEM / EMSC
16:00	InSight @ school: The Mars sismometer in the classroom (30 min) Jean-Luc Berenguer, Géoazur (CNRS / Université Côte d'Azur / IRD) & Secondary school Teacher
16:30	Break
16:45	GRANDMA: amateur and professional astronomers hunting for Kilonovae (30 min) Sarah Antier , APC (Université de Paris / CNRS / CEA)
17:15	REINFORCE: Bridging scientist and citizens (30 min) Rémy Le Breton , APC (Université de Paris / CNRS / CEA)
17:45	<i>Round table: Open-data and unpredictable events</i> (45 min) Sarah Antier, APC (Université de Paris / CNRS / CEA) Laure Fallou, CSEM / EMSC Asma Steinhausser, CR2P (Muséum National d'Histoire Naturelle)

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SPEAKERS



Sarah Antier is a CNES postdoctoral prize fellow at the APC laboratory, working on multi-messenger astronomy. Studing gravitational wave and electronomagnetic emission, she is also at the origin of the GRANDMA project, a network of professional and amateur telescopes looking for kilonovae.



Matteo Barsuglia is a CNRS senior scientist and head of the Virgo group at the Astroparticules and Cosmology in Paris. His research focuses on the detection of gravitational waves, in particular on the development of interferometric detectors. He is also the director of Paris Centre for Cosmological Physics.



Jean-Luc Berenguer is an Education and Outreach project manager at the Geoazur, as well as a science teacher in secondary school. He has been working for years on educational projects on seismology at school.



Catherine Boisson is a Senior Scientifst at the LUTH laboratory, in the Paris Observatory. She is involved æ ESCAPE, a project of virtual observatory developped by The European Open Science Cloud.



Rémy Bossu is a seismologist and at the head of the Euro-Mediterranean Seismological Centre (EMSC). Having a interest in social issues, he works on several projects of citizen seismology, including the LastQuake application.



Aude Chambodut is a Physicist at the School and Observatory of Earth Sciences (EOST) in Strasbourg. She is specialized in geomagnetism measurement and processes. She is one of the Scientific project manager of the data service pole ForM@Ter, in particular towards OpenScience. She is nominated member of the World Data System Scientific Council.

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Eric Chassande-Mottin is a a CNRS researcher with the Gravitation team at the APC laboratory. He is interested in the detection of gravitational waves with Virgo and LIGO, particularly data analysis aspects.



Laure Fallou is a sociologist and research officer 'Risks, Society and Social Media' at the Euro-Med Seismological Centre (EMSC). She studies the relation between citizen and seismic risk, in particular within citizen seismology projects.



Jérôme Gaillardet is a geochemist and an IPGP professor. He conducts research to explore the biogeochemical cycle of chemical elements on the Earth's surface. He is co-responsible for the national research infrastructure OZCAR federating perennial observatories of the Critical Zone of the Earth.



Frédéric Huynh is an IRD research enginner and the director of the DATA TERRA, a research infrastructure dedicated to Earth System observation data and services.



Joanna Janik is a senior research engineer in charge of STI training projects at the *Direction des Données Ouvertes de la Recherche* of the CNRS. She is also the co-pilot of the skills and training college of the Committee for Open Science, initiated by the French Ministry of Higher Education and Research.



Philippe Laurent is a CEA researcher at the APC laboratory. He worked on the XGRE instrument on the Taranis satellite and is at the head of the educational and participatory science project Belisama.

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Rémy Le Breton is a CNRS post-doc researcher at the APC laboratory, working on KM3NeT, a neutrino telescope located at the bottom of the Mediterranean Sea. He is also involved in The REINFORCE project, whose aim is to engage citizens with researchers.



Elise Lehoux is a library curator and a Doctor of History. She is currently an STI project manager in the library service of the University of Paris and a research data referent for the University of Paris.



Julien Peloton is a CNRS research engineer at the IJCLab laboratory in Université-Paris Saclay. He develops cutting-edge software tools to help solve big data issues in research, and notably for the LSST telescope data.



Asma Steinhausser is a researcher at the CR2P laboratory in the National Museum of Natural History. She is the coordinator of both Vigie-Ciel and Vigie-Terre participatory science programs.



Régis Terrier is a senior researcher with the High-Energy Astronomy group at the APC laboratory. Interested in gamma-ray and multi-messenger astronomy, particulary withe the HESS and CTA data, he is involved in the development of the open tool Gammapy.



Agata Trovato is a post-doc researcher in the field of Gravitational Waves. She works in the Virgo group at the APC laboratory. Her main responsibility lies with the Gravitational Wave Open Science Centre.

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ADVICES FOR THE PUBLIC

Here are some brief advices to help us ensure that the Thematic School you are about to attend online takes place in optimal conditions.

Before it begins

• As much as possible, choose a calm, comfortable environment, and of course with a good internet connection;

• Plan to have everything you think you need to follow the School on the best conditions (note-taking, drinks, etc.) at hand;

• The Thematic School will take place on Zoom :

Check if your computer has the required configuration to use the *Zoom* desktop client, or if your internet browser supports the *Zoom* web client.

More information on: <u>https://support.zoom.us/hc/fr/articles/201362023-Configuration-requise-pour-Win-dows-macOS-et-Linux</u>

During the School

- When you log in, clearly indicate your first names, last names and affiliations;
- If you have not already done so when you join the visio, switch off your microphone and camera.

You wish to ask a question

• When the presenter invites the audience to ask questions, press the «Raise your hand» icon proposed by *Zoom*;

• When the presenter gives you the floor, open your microphone to ask your question. Don't forget to turn it off at the end of your presentation.

You have a problem

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