

#### **HIGHLIGHTS AT A GLANCE**

- 08:30 Cassini and future perspectives for the exploration of the outer solar system (US3: Room E1); Application of remote sensing and Earth-observation data in natural hazard and risk studies (NH6.1/AS5.21/CR7.3/GI2.17/HS11.33/SM3.12/SSS13.54: Room L6)
- 13:30 Natural vs. anthropogenic threats to life on Earth (GDB5: Room E1); History of hydrology (HS1.8: Room C); Volcanic gas emissions (GMPV4.5/AS3.8: Room G1); The 2016–2017 Central Italy seismic sequence (TS5.4/SM1.06: Room K1); Marine pollution assessment, predictions and risk mapping (OS4.7/BG3.9: Room 1.85)
- 15:30 Climate extremes, biosphere and society: impacts, remote sensing, and feedbacks (IE1.1/BG1.15/NH8.7/NP9.3: PICO spot 4)
- 19:00 Sounds from the geology of Italy (PCN9: Room E1)
- All day Medal lectures (various rooms: see right); Short courses & ECS events (various rooms: see right); Meet EGU (EGU Booth); Division meetings (various rooms: see overleaf)

EGU Today helps you keep up with the many activities at the General Assembly by highlighting sessions and events from the programme. If you have comments, email the editor Bárbara Ferreira at media@egu.eu. The newsletter is also available at egu2018.eu/egu\_today.html and on the EGU2018 app.

### **EGU 2018 General Assembly**

# **Great Debate – Natural vs. anthropogenic threats** to life on Earth

From a possible reversal of the Earth's magnetic field to severe space weather events, there are many natural threats to life on Earth. At the same time, anthropogenic forces such as the changes in climate currently affecting our planet, also pose a threat to humans and other life forms. In this debate the effects of some of these natural threats will be put into perspective with the time scales, physical processes and consequences of the different scenarios of anthropogenic climate change that depend on how successful climate change mitigation will be.

GDB5: 13:30-15:00 / Room E1

# Cassini and future perspectives for the exploration of the outer solar system



Cassini grand finale. Credit: NASA/JPL-Caltech

The Cassini–Huygens Mission to Saturn, a collaboration between NASA, the European Space Agency (ESA), and the Italian Space Agency (ASI), has been a great example of the success expected from a large space mission built on international collaboration with ambitious goals. This Union Session will feature reports on the amazing discoveries that the mission brought in the 13 years it operated and the new understanding we have gained of the Saturnian system.

US3: 08:30-12:00 / Room E1

# Short courses & ECS events

- Visualisation in Earth Science: best practices (SC2.6/ESSI4.2: 10:30–12:00 / Room -2.91)
- EGU Early Career Scientists' Forum (PCN7: 12:15–13:15 / Room N2)
- How to find funding and write a research grant (SC3.12: 13:30–15:00 / Room -2.16)
- Science for Policy: What is it and how can scientists become involved in policy processes? (SC2.8: 13:30–15:00 / Room -2.91)
- Funding opportunities: ERC grants (SC3.14: 19:00–20:00 / Room N2)
- NEW: How to cartoon science (SC2.5: 19:00-20:00 / Room -2.16)

# Sounds from the geology of Italy

EMusic (ElectroMagnetic Music) is based on the idea of transforming geophysical data into sounds. Tonight join us in listening to live EMusic drawn from data collected in four sites in Italy.

PCN9: 19:00-20:00 / Room E1

### **Today's medal lectures**

- Vilhelm Bjerknes Medal Lecture by Pinhas Alpert (ML32/AS: 11:00-12:00 / Room F1)
- GD Divison Outstanding ECS Lecture by Thibault Duretz (ML39/GD: 11:30–12:00 / Room -2.21)
- TS Division Outstanding ECS Lecture by Fabio Corbi (ML48/TS: 11:45–12:00 / Room K1)
- Alexander von Humboldt Medal Lecture by Filippo Giorgi (ML1/CL: 12:15–13:15 / Room E1)
- GI Division Outstanding ECS Lecture by Giovanni Ludeno (ML40/GI: 13:30–14:00 / Room 0.49)
- NP Division Outstanding ECS Lecture by Davide Faranda (ML43/NP: 13:30–13:45 / Room E2)
- ERE Division Outstanding ECS Lecture by Victor Vilarrasa (ML37/ERE: 14:45–15:00 / Room M1)
- Lewis Fry Richardson Medal Lecture by Timothy N. Palmer (ML20/NP: 16:00–17:00 / Room E2)
- Beno Gutenberg Medal Lecture by Haruo Sato (ML9/SM: 19:00–20:00 / Room G1)
- Henry Darcy Medal Lecture by Alberto Montanari (ML15/HS: 19:00–20:00 / Room B)
- Ralph Alger Bagnold Medal Lecture by Todd
   A. Ehlers (ML26/GM: 19:00–20:00 / Room G2)
- Vening Meinesz Medal Lecture by Markus Rothacher (ML31/G: 19:00–20:00 / Room K2)

### **Meet EGU**

**EGU Booth, Hall X2** 



- Division President of Hydrological Sciences (Elena Toth), 10:00–11:15
- Co-editor in Chief of Climate of the Past (Eric Wolff), 10:30–11:15
- Division President of Earth Magnetism & Rock Physics (Angelo De Santis), 11:15– 12:00
- Division President of Seismology (Martin Mai), 11:15–12:45
- Division President of Planetary and Solar System Sciences (Stephanie C. Werner), 12:00–12:45
- Division President of Tectonics and Structural Geology (Claudio Rosenberg), 12:45–13:30
- Division President of Geodesy (Johannes Böhm), 13:30-15:00
- Division President of Biogeosciences (Giuliana Panieri), 13:30–15:00
- Division President of Natural Hazards (Giorgio Boni), 15:00–15:30
- Division President of Stratigraphy, Sedimentology and Palaeontology (Helmut Weissert), 15:00–16:15
- Co-editor in Chief of The Cryosphere (Thomas Mölg), 15:30–17:00

#### **Division meetings**

Today's meetings, taking place from 12:15 to 13:15, are:

- Biogeosciences (BG) / Room L2
- Cryospheric Sciences (CR) / Room N1
- Geomorphology (GM) / Room G2
- Ocean Sciences (OS) / Room 1.85

#### **The Assembly Online**





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# Climate extremes, biosphere and society: impacts, remote sensing, and feedbacks

This interdisciplinary event explores the linkages between climate extremes, biosphere and societal dynamics. Two keys aspects it emphasises are: 1) what impacts are caused by climate extremes on various aspects of the biosphere and society, and 2) which feedbacks exist amplifying or moderating the intensity, duration or extent of climate extremes.

IE1.1/BG1.15/NH8.7/NP9.3: PICO / 15:30-17:00 / PICO spot 4

### **History of hydrology**

This session aims to stimulate the discussion on how hydrological sciences, as a community, can develop a historical literacy and integrate this in teaching and research. It features contributions on the development of hydrology as a science, on the history of data sets and models, and on socio-hydrological aspects. Demetris Koutsoyiannis is an invited speaker.





Pont du Gard with aqueduct in upper tier. (Credit: Emanuele)

#### **Volcanic gas emissions**

This session will focus on all aspects of volcanic volatile degassing in the Earth's system. It includes an invited talk by Christoph Kern on remote sensing of volcanic degassing.

GMPV4.5/AS3.8: Orals / 13:30-15:00 / Room G1, Posters / Attendance 17:30-19:00 / Hall X2

## The 2016–2017 Central Italy seismic sequence

This session focuses on the understanding of the earthquake faulting processes of the recent Central Italy seismic sequence. It aims to draw knowledge from a broad range of disciplines (geology, palaeoseismology, seismology, rock mechanics), using GPS and Insar data, and interpretations relating of the seismic sequence.

TS5.4/SM1.06: Orals / 13:30-15:00 / Room K1
Posters / Attendance Fri. 17:30-19:00 / Hall X2

## Application of remote sensing and Earth-observation data in natural hazard and risk studies

Remote sensing and Earth observations are used increasingly in the different phases of the risk management and in development cooperation, due to the challenges posed by contemporary issues such as climate change, population pressure and increasingly complex social interactions. This session is dedicated to multidisciplinary contributions especially focused on the demonstration of the benefit of using Earth observations for the risk management.

NH6.1/AS5.21/CR7.3/GI2.17/HS11.33/SM3.12/SSS13.54: Orals / 08:30-12:00 / 13:30-15:00 /
Room L6, Posters / Attendance 17:30-19:00 / Hall X1

#### Marine pollution assessment, predictions and risk mapping

Oceanographic modelling is widely used to study the pathways and fate of marine pollutants such as oil spills, plastic litter, radionuclides and other contaminants. In this session, advanced models, operational applications and techniques related to polluting tracers on local, regional and global scales will be discussed, as well as the coupling with met-oceanographic transport fields from operational oceanography products such as Copernicus Marine Monitoring Environment Service.

OS4.7/BG3.9: Orals / 13:30-15:00 / Room 1.85, Posters / Attendance 17:30-19:00 / Hall X4

### Help us improve!

Feedback received last year was examined carefully and played a large part in shaping improvements for the EGU 2018 General Assembly. This year, we would like to ask you to, once again, take 5-10 minutes to complete our 2018 questionnaire. Your input will help shape the next EGU General Assembly.

egu2018.eu/feedback

#### What's on tomorrow

- Scientific research in a changing European Union: where we stand and what we aim for? (US5: 8:30–10:00 / Room E1)
- Plus 3 interdisciplinary events, 2 medal lectures, and 7 short courses