

2024 ESSI Division Meeting

European Geosciences Union

EGU24 General Assembly, Vienna and online | 14–19 April



Meetings | Publications | Outreach | www.egu.eu

EGU24: News from the EGU Programme Committee

- **EGU Programme Committee** has **two Co-chairs**, appointed by the EGU Council. They are supported by **an Events Manager** staff member from EGU office
- **Programme Committee:** comprised of **General Positions** (Executive Board, Conference Organizer, PC Co-chairs), and **Programme Group Chairs** (25 Programme Groups reflecting the 22 EGU Divisions with their science officers, and SC, ITS, EOS programmes)
- **Our goal:** to offer a reliable, **hybrid** format of the General Assembly with flexibility to respond to any emerging needs, as **inclusive** and **environmentally friendly** as possible, while responding to the main **scientific challenges of geosciences worldwide**



Maria-Helena
Ramos

PROGRAMME COMMITTEE
CO-CHAIR



Athanasios Nenes

PROGRAMME COMMITTEE
CO-CHAIR



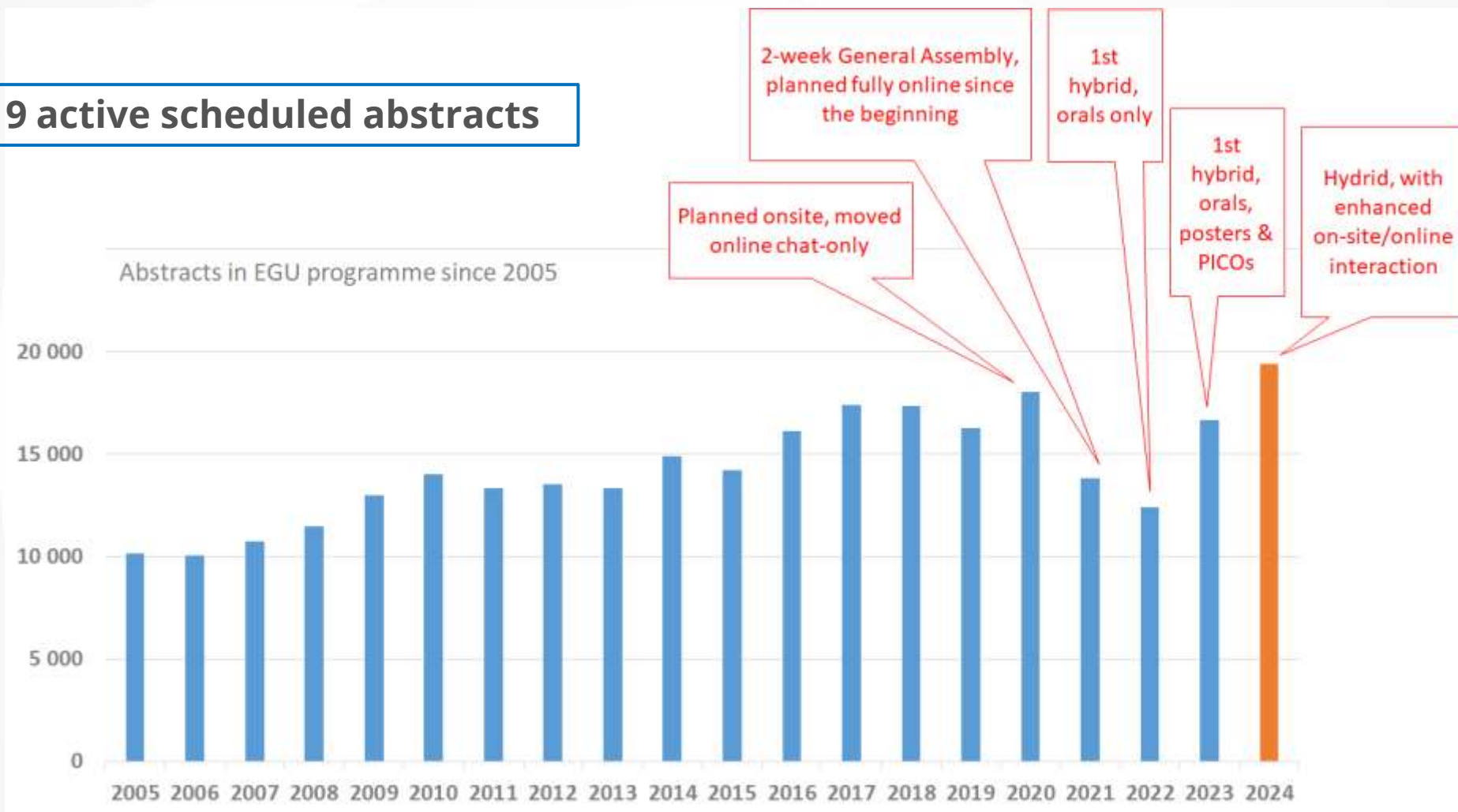
Jane Roussak

EVENTS MANAGER

https://egu24.eu/about/programme_committee_composition.html

EGU24: numbers at a glance (as of 29 March 2024)

19,319 active scheduled abstracts



EGU24: numbers at a glance (as of 4 April 2024)

- 19,319 **active scheduled abstracts**
- 16,746 **paid registrations** (8% for **virtual participation**)
- 50% of **virtual participants benefited from free registration** (Undergraduate/master students & Low- & lower-middle income countries)
- 37% of on-site participants and 52% of virtual participants are **PhD candidates, Master or Undergraduate students**
- 2% of on-site participants and 24% of virtual participants are from **Low & Lower-middle income countries**
- **Gender** (Female / Male / Non-binary): On-site (39% / 58% / 0%) & Virtual (42% / 54% / 1%)
- 112 **different countries** for on-site participation; 90 for virtual participation



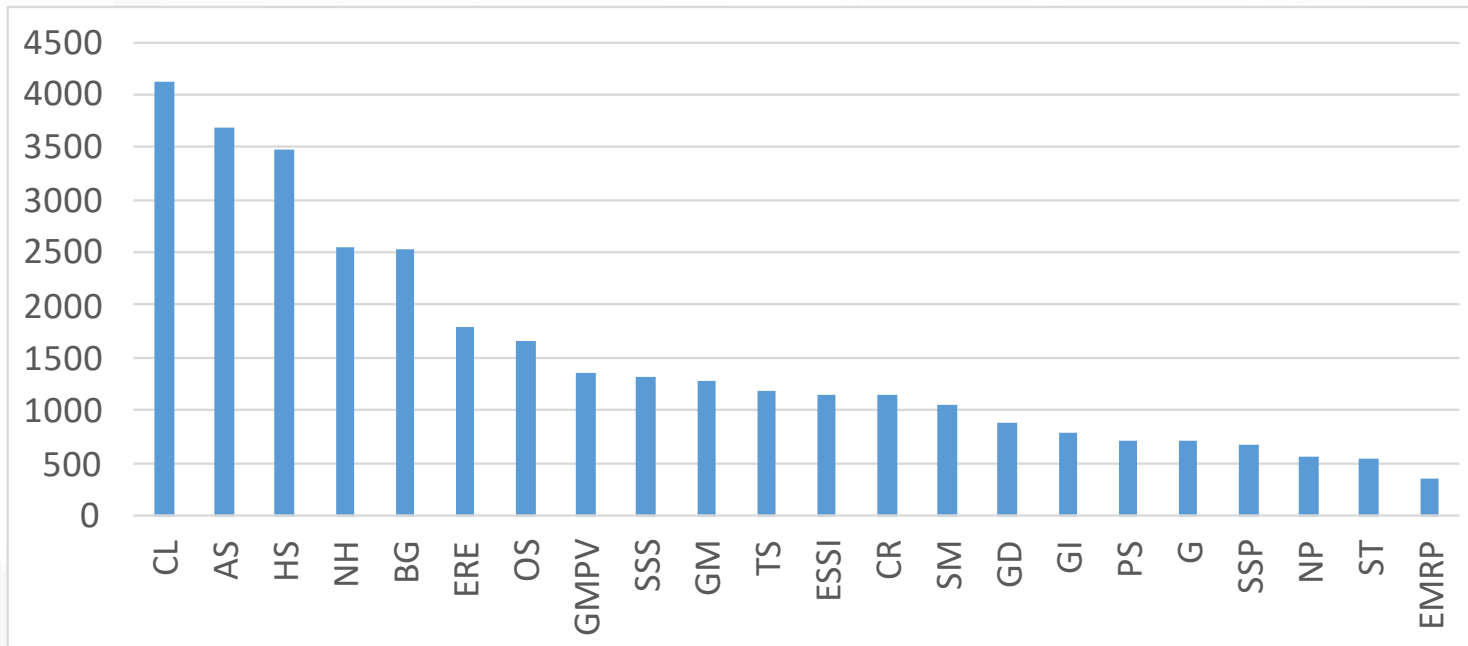
EGU23 main entrance

Photo credit: Pfluegl 2023

EGU24: numbers at a glance (as of 4 April 2024)

EGU Division/PG affiliation of paid registrations

(note: a participant can choose more than one division of affiliation)



EGU24: numbers at a glance (as of 29 March 2024)

- **1,025 active sessions** (+11% EGU23):
 - 675 division-led sessions, of which 42 are ITS sessions
 - 17 Education and Outreach Sessions (EOS) + GIFT workshop
 - 61 Short Courses + 2 Artist in Residence workshops
 - 39 Medal and Award Lectures
 - 6 Union Symposia and 10 Great Debates
 - 152 Townhall & Splinter meetings scheduled
- **ECS Networking, Science for Policy, and EDI Committee events**

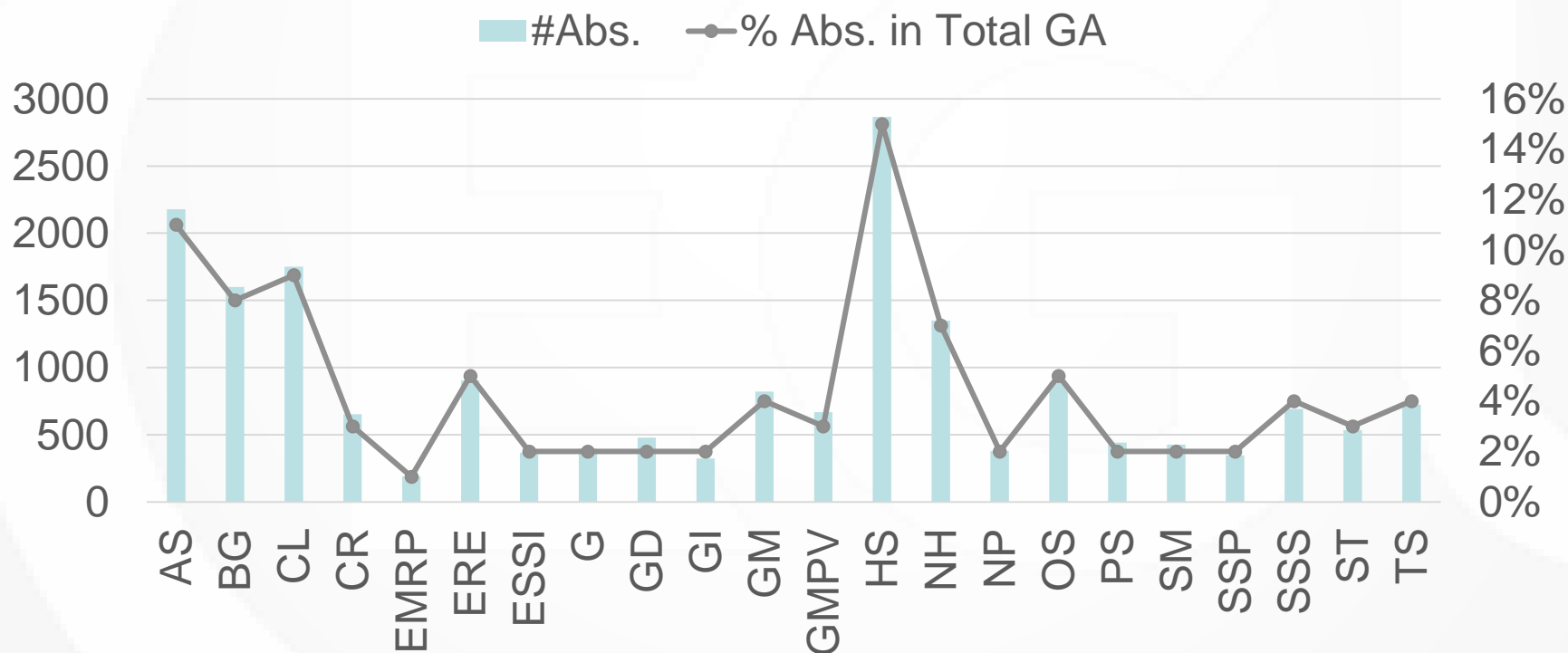


EGU23 oral presentation
Photo credit: Pfluegl 2023

More on: <https://www.egu24.eu/>

EGU24: numbers at a glance

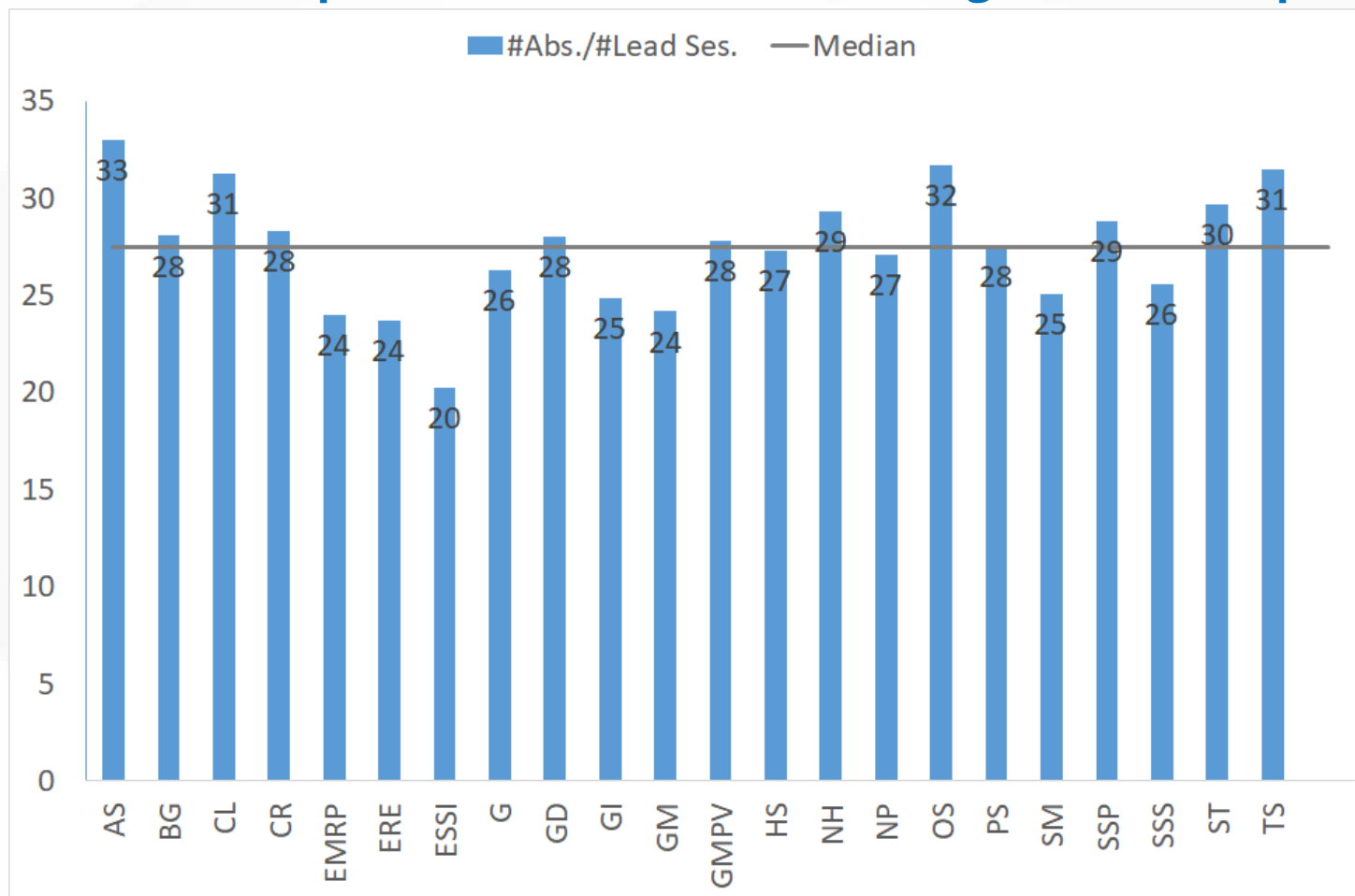
Abstracts per Programme Group (PG)



(as of 24 March 2024)

EGU24: numbers at a glance

Abstracts per (lead) session in each Programme Group



(as of 24 March 2024)

ESSI Division Statistics

PG session statistics		All abstract statuses		ECS Union
Proposed	27	Submitted	Total: 832	57%
Added	0		Thereof rejected: 0	ECS ESSI
Pending	0		Thereof withdrawn: 14	43%
Rejected	0	Scheduled	Total: 818	
Withdrawals	10		Thereof withdrawn posters on site: 22	
Active	17		Thereof withdrawn orals: 6	
thereof pico	3	Active scheduled	Thereof withdrawn PICOs: 2	
			Total: 788	



Union Symposium 3

**Bridging the scales:
The Arctic methane and
permafrost challenge**

**Friday 19 April, 8:30–10:15 CEST
Room E1**

#EGU24



Union Symposium 4

Deep-time Digital Earth

**Thursday 18 April, 14:00–18:00 CEST
Room E1**

#EGU24



Great Debate 2

**Does climate change affect
earthquake risks?**

**Thursday 18 April, 8:30–10:15 CEST
Room E1**

#EGU24



Great Debate 4

**Early Warnings for All (EW4ALL)
Initiative: science needs for the
global ambition to protect
everyone by 2027**

**Thursday 18 April, 10:45–12:30 CEST
Room E1**

#EGU24



Great Debate 6

If informing is not enough, how should scientists engage to accelerate the social transformation required by climate change and biodiversity collapse?

**Friday 19 April, 14:00–15:45 CEST
Room E1**

#EGU24



Great Debate 9

Artificial Intelligence in scientific publishing: blessing or bane?

**Friday 19 April, 10:45–12:30 CEST
Room E1**

#EGU24



EGU Award & Medal Celebration

**Wednesday 17 April,
17:30-19:30 CEST**

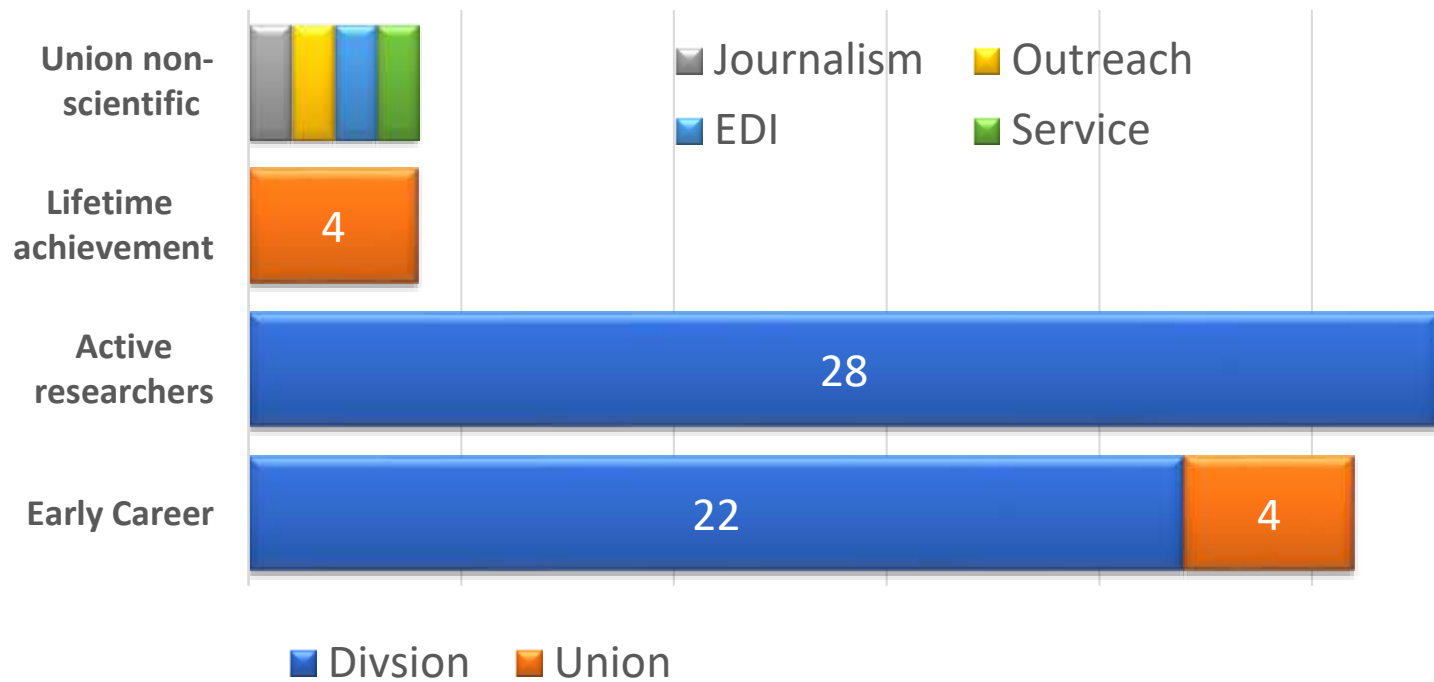
#EGU24

Room E1



EGU awards & medals

EGU features an extensive awards and medals programme on all career stages



- 4 **Union Awards** for services for the union, science journalism, outreach, and EDI
- 4 prestigious **Union Medals**, recognising excellence in scientific research
- 28 **Division Medals**, awarded for significant disciplinary contributions in Earth, planetary and space sciences
- 4 **Union** and 22 **Division Awards** for Outstanding Early Career Scientists



How to become an awardee?

- Nominations are exclusively by EGU members (**no self nomination**)*
- Candidates do not need to be EGU members.
- Individual award and medal committees are then evaluating the nominations selecting the most deserving candidate based on **scientific achievements****.

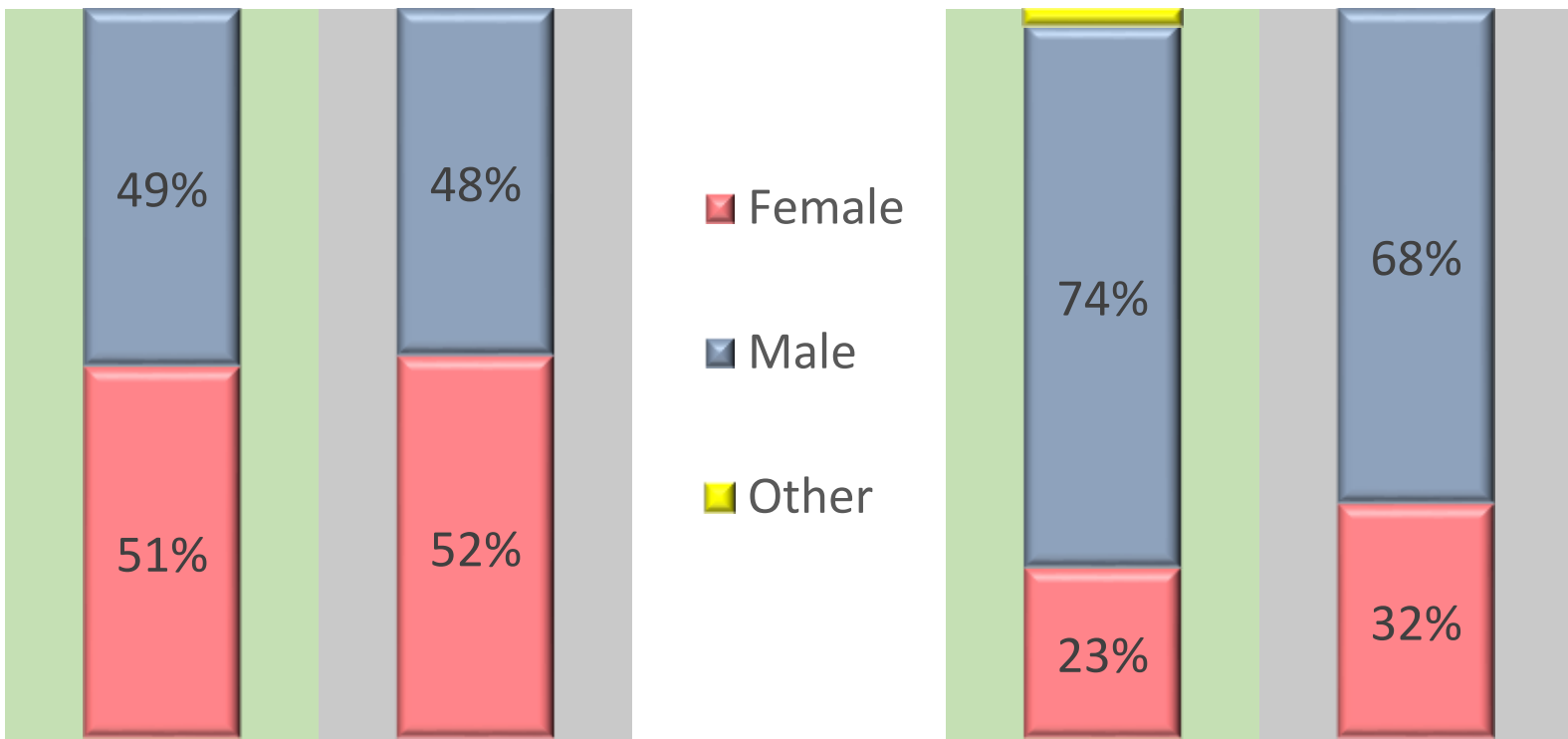
* An exception is one award to promote excellence in journalism allowing nominations from non-members and self nominations

** plus one medals each for journalism, outreach and service to the union



EGU awards & medals

Some statistics for the 2024 awards



Nominations Awarded

Early Career Awards

Nominations Awarded

Union and Division awards

More information on awards

EOS3.1
 Poster EGU24-1620
Equality of opportunities in geosciences: The EGU Awards Committee experience
 Wed, 17 Apr, 10:45–12:30
 Hall X1 | X1.63

Meet the chair of the Awards Committee
 Mon, 15 Apr, 17:30–18:00
 EGU booth – Hall X2



How to nominate

Where: <https://www.egu.eu/awards-medals/nominations/>

When: Deadline is **June 15 every year**

What is required:



	Division and Union medals	Outstanding Early Career Scientists Awards
Nomination letter	5000 characters (including spaces)	2500 characters (including spaces)
Curriculum Vitae	2 pages	1 page
Selected bibliography	2 pages	½ page
Supporting letters	3-5 5000 characters (including spaces)	None (multiple nominators possible)

Nomination and supporting letters via on-line form

Head on over to the EGU Booth!

- Learn about EGU activities
- Meet members of the EGU Council & Committees
- Cast your vote for the photo competition
- Browse through EGU merchandise... and more!



Did you know that we help teachers attend EGU24 for the Geosciences Information for Teachers (GIFT) workshop?

The GIFT programme offers secondary (and primary) school teachers the opportunity to upgrade their knowledge in geoscience themes, shortening the time between state-of-the-art science research and textbook information. This initiative is led by the **EGU Education Committee**.

To learn more, visit
www.egu.eu/education



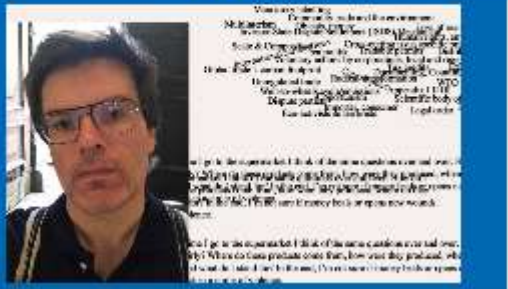
2019 GIFT Workshop
Photo credit: Pfluegl 2019

Art-Science offerings at EGU24

EGU24 Artists in Residence

visit their booths in Foyer D!

Ilias Tsagas
Poet



Lucía Pérez-Díaz
Illustrator



Geo Cinema

Mon, Tues, Thurs & Fri
18:00-20:00 in room E1

Art-Science sessions at EGU24:



EGU24 artists raising awareness of EDI in the Geosciences

learn more at their booth in **Hall X2!**

Nkosingiphile Mazibuko
Iziko Museums of South Africa



Childcare Art Exposition



growing gallery located in **entrance of Hall X1**

Divisions represented:
G, GD, PS

Stop by the EGU24 Gather.Town!



- Spatial video-conferencing platform available to all EGU24 registered participants
- Used for **virtual posters** during timeblock 3, networking & more
- Custom design inspired by the Austria Center Vienna!



Co-sponsored Sessions at the General Assembly

EGU encourages session co-sponsoring **by other colleague organizations** as a means of **strengthening ties and encouraging collaboration**.

The colleague organization must agree to session co-sponsoring and the convener team should be comprised of individuals from both organizations. Note: Session co-sponsoring is expected to be reciprocal (ideally with sessions at meetings of both partners).

Co-sponsoring organizations will be listed in the session subtitle (automatically set by the system):

SM1.3

[The January 1, 2024 Mw7.5 Noto Peninsula, Japan, earthquake, associated tsunami, and earthquake swarm](#) ▶

Co-organized by NH4, [co-sponsored by JpGU](#)

Convener: Luca C Malatesta [Q](#) | Co-convener: Alice-Agnes Gabriel [Q](#)

▶ [Orals](#) ★ | Tue, 16 Apr, 08:30–10:15 (CEST) [■](#) Room D3

The EGU Topical Events Committee announces the call for Training School applications: 6 May - 17 June, 2024



Photo credit: **V. De Micco, 2024**

The EGU provides **financial support** to training school organisers in order to facilitate participation of early career scientists and/or to support the quality of the school through field trips or by inviting exceptional lecturers.

Learn more at
www.egu.eu/meetings/training-schools





Join a Science for Policy Session at EGU24!

Find out how you can more effectively engage with policymakers and how your research can have policy impact

EGU's Science for Policy Help Desk
Every day, 12:00-13:00 at the EGU booth

See the full EGU24 Science for Policy Programme





Subscribe to the EGU's Science for Policy Newsletter!

Monthly updates on:

- EGU's #Sci4Pol activities
- Opportunities to engage with policymakers
- Science-policy events and workshops
- Geoscience-relevant policy news



EGU Outreach Committee

Consisting of 11 volunteers contributing to the Union through the following aims:

- **Training geoscientists in outreach, public engagement, and science communication**
Free online workshops, Education & Outreach Sessions (EOS), Awards lectures...
- **Facilitating geoscientists to do outreach and public engagement**
Public Engagement Grants, Geoscience Days, Teacher-Scientist Pairing, EGU Public Lecture...
- **Developing relationships between geoscientists and journalists / media**
Science Journalism Fellowship, Angela Croome Award...
- **Fostering the mentoring culture across EGU**
Joint with Equality Diversity & Inclusion Committee and Early Career Scientist Representatives

Come to the EGU booth to find out more.

Union Awards - Outreach

The EGU has several awards celebrating excellent practices that complement purely scientific achievements:

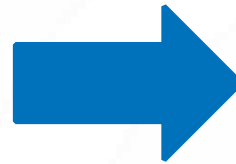
- **Angela Croome Award** for Earth, space and planetary sciences journalism
- **Champion(s) for Equality, Diversity and Inclusion Award** for significant contributions in advancing the values of EDI in the geoscience community
- **Katia and Maurice Krafft Award** for Geoscience outreach and engagement

Please **consider nominating** your colleagues / journalists you have worked with who may be worthy recipients of these awards. Attend the Award Lectures to see the excellent practice being celebrated this year.

Equality, Diversity, and Inclusion (EDI) at EGU24

NEW:

Dedicated programme
category compiling EDI
sessions of interest!



We are committed to providing a **safe, open, accessible, and respectful General Assembly**, as per the EGU Code of Conduct.

Any behaviour that is disrespectful or violates the Code of Conduct can be **reported to the designated Person(s) of Trust**

- by emailing **conduct@egu.eu**
- or on-site, 8:00-17:00 at the **EGU Info Desk (Yellow level Foyer)**

More information available at https://www.egu24.eu/about/egu_general_assembly_rules_of_conduct.html

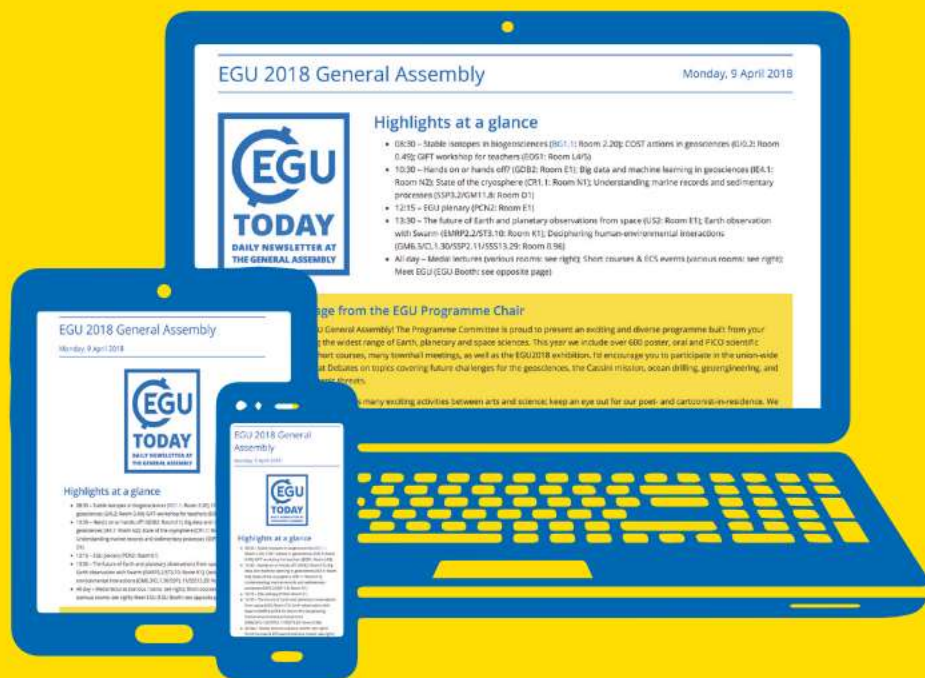


The Daily Newsletter at the General Assembly

EGU TODAY IS NOW DIGITAL!



www.egu.eu | info@egu.eu



All issues of the newsletter
will be made available at

www.egu.eu/egutoday/

through the conference app
and on screens inside the ACV.




EGU 2024
Participants
receive a **discount**
of **50 %** on the
entrance fee
if wearing their
name badge

**50 %
DISCOUNT**
April 13
to 21

The world's
oldest and largest
meteorite exhibition
...and much more!

natural history
museum vienna 



natural history museum vienna | 1010 Vienna, Maria-Theresien-Platz | www.nhm.at |   
Daily except Tuesday 9 a.m. – 6 p.m., Wednesday 9 a.m. – 8 p.m.

Did you know the EGU has a monthly newsletter?



www.egu.eu | info@egu.eu



The email newsletter
informs EGU members about

- EGU NEWS AND BLOGS
- GENERAL ASSEMBLY UPDATES
- HIGHLIGHTS FROM EGU JOURNALS
- JOBS AND MEETINGS

and much more!



www.egu.eu/newsletter



Open Access Publications



- Open Access Journals
- Interactive Public Peer Review



www.egu.eu/publications

A scenic landscape featuring a waterfall cascading over rocks into a pool of water. The background shows a wide, flat expanse, possibly a beach or a plain, under a cloudy sky. A large, bright yellow speech bubble is overlaid on the right side of the image, containing the text 'Please Give Us Feedback!'.

**Please
Give Us
Feedback!**

egu24.eu/feedback

ESSI

Earth and Space Science Informatics

The EGU ESSI Division

President and Programme Group Chair: Jens Klump

- Until EGU 2025

Deputy President:

- outgoing: Martina Stockhause
- Incoming: Kaylin Bugbee

The EGU ESSI Division

Science Officers:

- Kerstin Lehnert (Geochemistry)
- *Sven Willner* (Meteorology and Climatology) (outgoing)
- Antonio Novellino (Oceanography)
- Christof Lorenz (Hydrology)
- Martina Stockhause (Liaison AGU Informatics Section)

OSPP Coordinator: *Christopher Kadow* (outgoing)

Medal Committee Chair: Kirsten Elger

ECS Representative: *Kaori Otsu* (outgoing)

The EGU ESSI Division

Section conveners:

ESSI 1: Next-Generation Analytics for Scientific Discovery: Data Science, Machine Learning, AI

- Federico Amato
- Kerstin Lehnert
- *Christian Chwala*

ESSI 2: Data, Software and Computing Infrastructures across Earth and Space Sciences

- Horst Schwichtenberg
- Mohan Ramamurty
- Paolo Mazzetti

ESSI 3: Open Science Informatics for Earth and Space Sciences

- Kirsten Elger
- Pierre Philippe Mathieu
- *Martina Stockhause*

ESSI 4: Advanced Technologies and Informatics Enabling Transdisciplinary Science

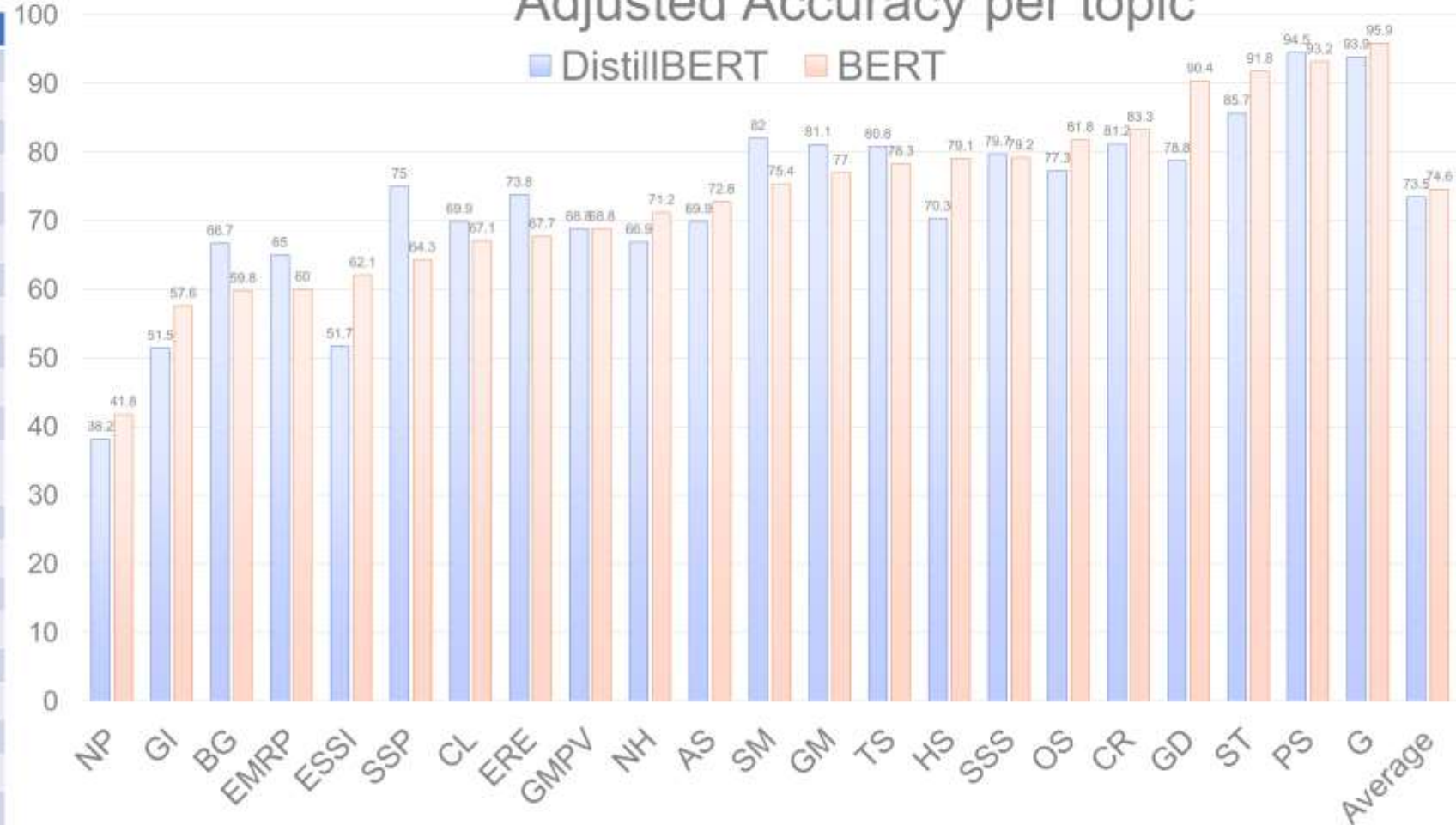
- Jane Hart
- Jens Klump
- Lesley Wyborn

More results – Adjusted Accuracy per Topic



Adjusted Accuracy per topic

■ DistilBERT ■ BERT



Abbre.	Geoscience Topics
AS	Atmospheric Sciences
BG	Biogeosciences
CL	Climate: Past, Present, Future
CR	Cryospheric Sciences
EMRP	Earth Magnetism & Rock Physics
ERE	Energy, Resources and the Environment
ESSI	Earth & Space Science Informatics
G	Geodesy
GD	Geodynamics
GI	Geosciences Instrumentation & Data Systems
GM	Geomorphology
GMPV	Geochemistry, Mineralogy, Petrology & Volcanology
HS	Hydrological Sciences
NH	Natural Hazards
NP	Nonlinear Processes in Geosciences
OS	Ocean Sciences
PS	Planetary & Solar System Sciences
SM	Seismology
SSP	Stratigraphy, Sedimentology & Palaeontology
SSS	Soil System Sciences
ST	Solar-Terrestrial Sciences
TS	Tectonics & Structural Geology

[1] Sanh et al. (2019). DistilBERT, a distilled version of BERT: smaller, faster, cheaper and lighter. <https://arxiv.org/pdf/1910.01108.pdf>

[2] Devlin et al. (2018). BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding. <https://arxiv.org/pdf/1810.04805.pdf>



Changes in EGU ESSI

- ***New Science Officer Meteorology and Climatology***
Sven Willner is stepping down from the role. We need a new candidate.
- ***New Early Career Scientist Representative***
Kaori Otsu is stepping down from the role. We need a new candidate.
- ***New Section Programme Convener ESSI 1: Next-Generation Analytics for Scientific Discovery: Data Science, Machine Learning, AI***
Christian Chwala will join Federico Amato and Kerstin Lehnert
- ***New Section Programme Convener for ESSI 3: Open Science Informatics for Earth and Space Sciences***
Dirk Fleischer is stepping down from his role as Section Programme Convener. The new candidate is Martina Stockhause.

EGU ESSI Division Medal

- ***Reinstating the annual cycle of the ESSI Division Medal***

EGU Council voted to change the periodicity of the ESSI Division Medal to an annual award. We were able to get it included for 2025

Deadline for nominations: 15 June 2024.

EGU ESSi Division Medal Committee

- ***Chair: Kirsten Elger***

Stefano Nativi

Mikhail Kanevski

Alice Fremant

Francois Robida (to be confirmed)

In Memoriam Paul Wessels

Dr Paul Wessel, the 2020 Ian McHarg Medal winner, passed away on 26 March 2024.

Among Paul's many career-spanning achievements was his appointment as AGU Union Fellow in 2012 for his pioneering work in lithosphere dynamics and being awarded the Informatics' Leptoukh Lecture Award in 2022 for his enduring contribution to geoinformatics through the development of the globally-used open-source software, Generic Mapping Tools (GMT).

Paul's passing is a great loss to tectonophysics and informatics communities alike.

Informatics Section at AGU



Overview:

- Approximately 900 Primary members (2023)
- In search of volunteers for committees!
 - Nominations, Fellows, EDI

News/Recent Activities:

- Revived Early Career Researcher events - very successful in 2023!
- Constituted an EDI committee in 2023
 - Conducted a section survey
 - Engaged with other section EIU committees for synergies and collaboration potential
- Published an article in AGU's Perspectives of Earth and Space Scientists (<https://doi.org/10.1029/2023cn000222>)
- Began collaboration with a US NSF project
 - IN Section will co-host training workshop on the use of data sonification for cross-disciplinary data presentation/analysis
- First collaboration with EGU ESSI on a session ESSI2.1: Advancing Joint Research on Grand Challenges

Looking Forward:

- Revise the Informatics outdated section description
- Seek additional cross-organization session collaborations
- Assess Informatics EDI priorities to determine next steps on behalf of section

Any Other Business?

- *Your Questions: ...*