



**TS** TECTONICS AND STRUCTURAL GEOLOGY

Division on Tectonics and Structural Geology

# Welcome to the 2024 TS Division Meeting

# CONFLICT

**Arthur Holmes Medal Lecture**

**Claudio Faccenna**

Tue, 16 Apr, 12:45–13:45 (CEST)

Room E1

**Orogeny and mantle dynamics :**

**Holmes (1931) revisited**

## Stephan Mueller Medal 2024: Yann Klinger



The 2024 Stephan Mueller Medal is awarded to Yann Klinger for his exceptional interdisciplinary contribution to the fields of seismology and palaeo-seismology, in particular, for his groundbreaking development of space seismology.

Long citation at: <https://www.egu.eu/awards-medals/stephan-mueller/2024/yann-klinger/>



# Medal Lectures



**Yann Klinger**

**Stephan Mueller Medal**

**Thursday, 18 Apr., 19:00-19:40**

**Room G1**

***Fault segmentation, off-fault  
deformation, and fault maturity***

**#EGU24**

# The Marie Tharp/Stephan Mueller Medal committee 2023-24

Chair : Mary Ford



Members :

2020:



Mathilde Cannat

2021:



Dietmar Müller

2022:



Francesca Funiciello

2023:



Richard G. Gordon

**Ex-officio members** : TS president Paola Vannucchi and chair of the EGU awards committee Thomas Blunier



# The Marie Tharp/Stephan Mueller Medal committee 2024-25

Chair : Mary Ford



Members :



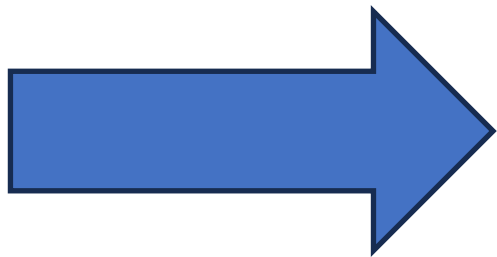
Ex-officio members : TS president Paola Vannucchi and chair of the EGU awards committee Thomas Blunier

## Early Career Scientist Award 2024

Not awarded.

One nomination.

The committee, after long discussion, decided that the nominee was not at the level required for the award.



**Submit nomination for 2025!**

# 2022 OSSP Awardees



Afonso Gomez

(PhD Candidate – in 2023 – University of Lisbon)

*2D numerical modelling of Tethyan-type ophiolite emplacement:  
The role of overriding plate age, serpentization, and OCT width.*

(Gomes, A. S.; Rosas, F. M.; Duarte, J. C.; Riel, N.; Schellart, W. P.; Almeida, J.)



Caroline Haslebacher

(PhD Candidate – in 2023 – University of Bern)

*Mapping linear surface features on Europa using a deep learning framework*

(Haslebacher, C.; Thomas, N.)



## TS Division OECSA committee 2024-2025 same as 2023-2024

Chair: TS president, Paola Vannucchi



Members: Last four awardees



**2020:**  
**Christoph von Hagke**



**2021:**  
**Carolyn Boulton**



**2022:**  
**Mojtaba Rajabi**



**2023:**  
**Jessica McBeck**

# TS 2022-2023 officers

- President:

Paola Vannucchi



- Deputy-president:

João C. Duarte



- Programme (Science) officers:



Derya Guerer



Christoph von Hagke



Anne Pluymakers



Pietro Sternai



Clare Bond

- OSPP:

Chiara  
Del Ventisette



- ECS Representative:

Gino  
de Gelder



- Media:

Silvia  
Brizzi



- Blog:

Hannah  
Davies



# TS 2023-2024 officers

- President:

Paola Vannucchi



- Deputy-president:

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- Programme (Science) officers:



Derya Guerer



Christoph von Hagke



Anne Pluymakers



Pietro Sternai



Clare Bond

- OSPP:

Chiara  
Del Ventisette



- ECS Representative:

Sasha  
Zertani



- Media:

Silvia  
Brizzi



- Blog:

Hannah  
Davies





# Early Career Scientists TS team & activities

1 Union-level ECS Rep: 2-4 yr (incl. secretary)

22 Division-level ECS Reps

200+ ECS Reps team members

## UNION LEVEL REP



**David  
Fernández-Blanco  
(Former TS Rep!)**

## TS DIVISION LEVEL REP



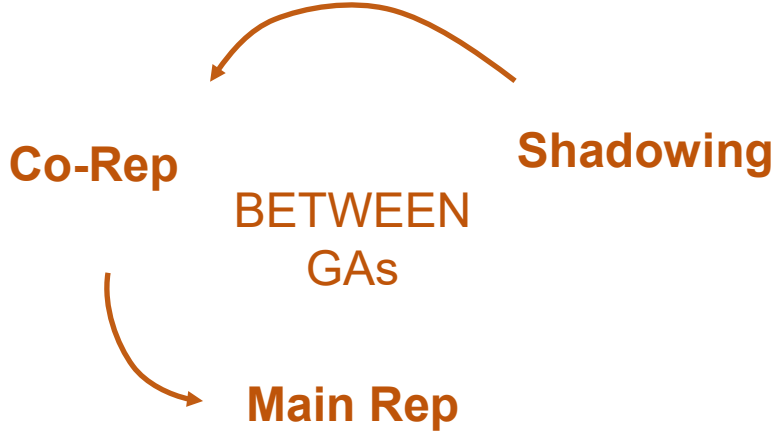
**Gino de Gelder (lost in an  
Indonesian fieldwork but  
in Vienna in spirit)**



The division level Rep:

- Reference for division teams
- Involved in a Working Group (WG)
  - Activities & Impact
  - Outreach & Communication
  - Life-Career Wellness
  - Equality, Diversity & Inclusion

# TS ECS Reps



## UNION LEVEL REP



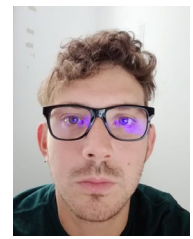
David Fernández-Blanco



Sascha Zertani



2023-24



Riccardo Lanari



Riccardo Lanari



2023-24



Hannah Davies



Gino de Gelder



Sascha Zertani



search: TSdivision



@EGU\_TS



ecs-ts@egu.eu



# Early Career Scientists TS Team

## BLOGS

**Hannah Davies**

*Lead Blog editor*



*Samuele Papeschi; Filippo  
Must-Read team...*



[blogs.egu.eu/divisions/ts](https://blogs.egu.eu/divisions/ts)

Features from the field  
Must-read papers  
Geotandem  
Geomythology

2021-2022: 29 blogposts  
(end of virtual COVID era...)  
2022-2023: 10 blogposts  
2023-2024: 10 blogposts

BLOG EDITORS VERY  
WELCOME!

**Silvia Brizzi**  
*Lead Media manager*



## MEDIA



*Arnab Roy; Frank Zwaan;  
Thorben Schofisch;  
Alessandro Petroccia*

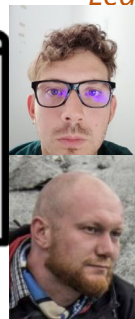
Monday ECS post  
Tectonic modeling Tuesday  
Friday jobs  
Must-read comm

NEW MEMBERS/IDEAS  
VERY WELCOME!

## ACTIVITIES

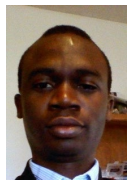
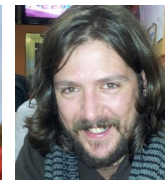
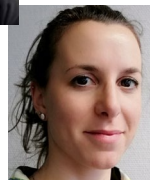
**Representatives (Gino, Sascha, Riccardo)**

*Lead Activity managers*



*David Fernández-Blanco; Gianluca  
Bosetto; Patricia Cadenas; Armin  
Muller; Ola Akintomide; Adriana Guatame-  
rri; Marta Marchegiano...*

TS Must-Read  
papers, short  
courses, &  
more...



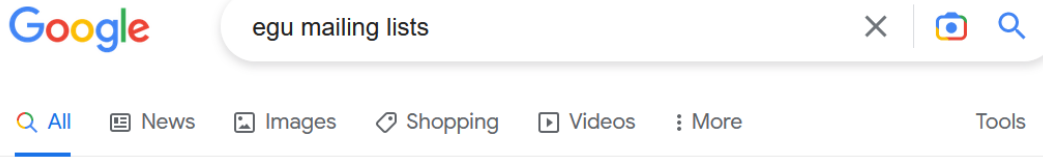
search: TSdivision



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About 3.830.000 results (0,44 seconds)

[European Geosciences Union](https://lists.egu.eu)  
[https://lists.egu.eu › mailman3 › lists](https://lists.egu.eu/mailman3/lists)

**List Index - lists.egu.eu**  
 List name, Post address, Description. AS-ECS, as-ecs@lists.egu.eu, **Mailing list** of the **EGU** Atmospheric Sciences (AS) Division's early career scientists.

[https://www.egu.eu › newsletter](https://www.egu.eu/newsletter)

**Outreach - EGU newsletter**  
 The **EGU** newsletter is a short **email** publication sent to **EGU** members on a monthly basis. It informs the Union membership about **EGU** events and activities, ...

[https://lists.egu.eu › mailman3 › lists › os.lists.egu.eu](https://lists.egu.eu/mailman3/lists/os.lists.egu.eu)

**Info | os@lists.egu.eu**  
 Summary. **Mailing list** of the **EGU** Ocean Sciences (OS) Division. To contact the list owners, use the following email address: os-owner@lists.egu.eu ...

[https://lists.egu.eu › mailman3 › lists](https://lists.egu.eu/mailman3/lists)

Postorius Lists Archives

## Mailing Lists

Role:

List name	Post address	Description
<a href="#">AS-ECS</a>	as-ecs@lists.egu.eu	Mailing list of the EGU Atmospheric Sciences (AS) Division's early career scientists
<a href="#">AS</a>	as@lists.egu.eu	Mailing list of the EGU Atmospheric Sciences (AS) Division
<a href="#">BG-ECS</a>	bg-ecs@lists.egu.eu	Mailing list of the EGU Biogeosciences (BG) Division's early career scientists
<a href="#">BG</a>	bg@lists.egu.eu	Mailing list of the EGU Biogeosciences (BG) Division
<a href="#">CL-ECS</a>	cl-ecs@lists.egu.eu	Mailing list of the EGU Climate: Past, Present & Future (CL) Division's early career scientists
<a href="#">CL</a>	cl@lists.egu.eu	Mailing list of the EGU Climate: Past, Present & Future (CL) Division
<a href="#">CR-ECS</a>	cr-ecs@lists.egu.eu	Mailing list of the EGU Cryospheric Sciences (CR) Division's early career scientists
<a href="#">CR</a>	cr@lists.egu.eu	Mailing list of the EGU Cryospheric Sciences (CR) Division

# How to stay informed

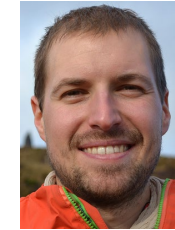
Google search results for "egu mailing lists". The search results show a link to "European Geosciences Union" and a "List Index - lists.egu.eu". The list index page is highlighted with a red box and contains the following table:

Role:

List name	Post address	Description
ECS	ecs@lists.egu.eu	Low-traffic announcement list for Early Career Scientist (ECS) members of the EGU
EGU newsletter	newsletter@lists.egu.eu	A monthly information service for EGU members
TS-ECS	ts-ecs@lists.egu.eu	Mailing list of the EGU Tectonics and Structural Geology (TS) Division's early career scientists
TS	ts@lists.egu.eu	Mailing list of the EGU Tectonics and Structural Geology (TS) Division
CR-ECS	cr-ecs@lists.egu.eu	Mailing list of the EGU Cryospheric Sciences (CR) Division's early career scientists
CR	cr@lists.egu.eu	Mailing list of the EGU Cryospheric Sciences (CR) Division



# JOIN THE ECS TS TEAM !



[ecs@lists.egu.eu](mailto:ecs@lists.egu.eu)

[ts-ecs@lists.egu.eu](mailto:ts-ecs@lists.egu.eu)



search: TSdivision



@EGU\_TS



[ecs-ts@egu.eu](mailto:ecs-ts@egu.eu)

# EGU25 GA in Vienna

**27 April-2 May**

Thank you and enjoy the meeting!

**Please find a moment to select and  
nominate colleagues for the  
TS medals and for the OECS award!**

**Due date is 15<sup>th</sup> of June**

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



## 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	1 page	1/2 page
Curriculum Vitae	2 pages	1 page
Selected bibliography	2 pages	1/2 page
Supporting letters	3-5 (maximum 1 page each)	-



# TS Division Medals:

## Experienced Scientists:

### The **Stephan Mueller Medal**

Outstanding contributions to the discovery of the structure of the lithosphere and interdisciplinary approaches to the understanding of plate tectonics.



### The **Marie Tharp Medal**

Outstanding contributions to the discovery of the structure of the ocean floors and plate tectonic processes.

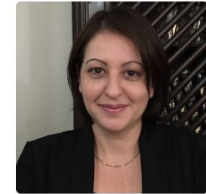


## Outstanding Early Career Scientist

# The General Assembly organization

## 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**



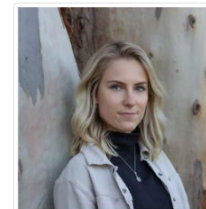
Maria-Helena Ramos

PROGRAMME COMMITTEE  
CO-CHAIR



Athanasios Nenes

PROGRAMME COMMITTEE  
CO-CHAIR



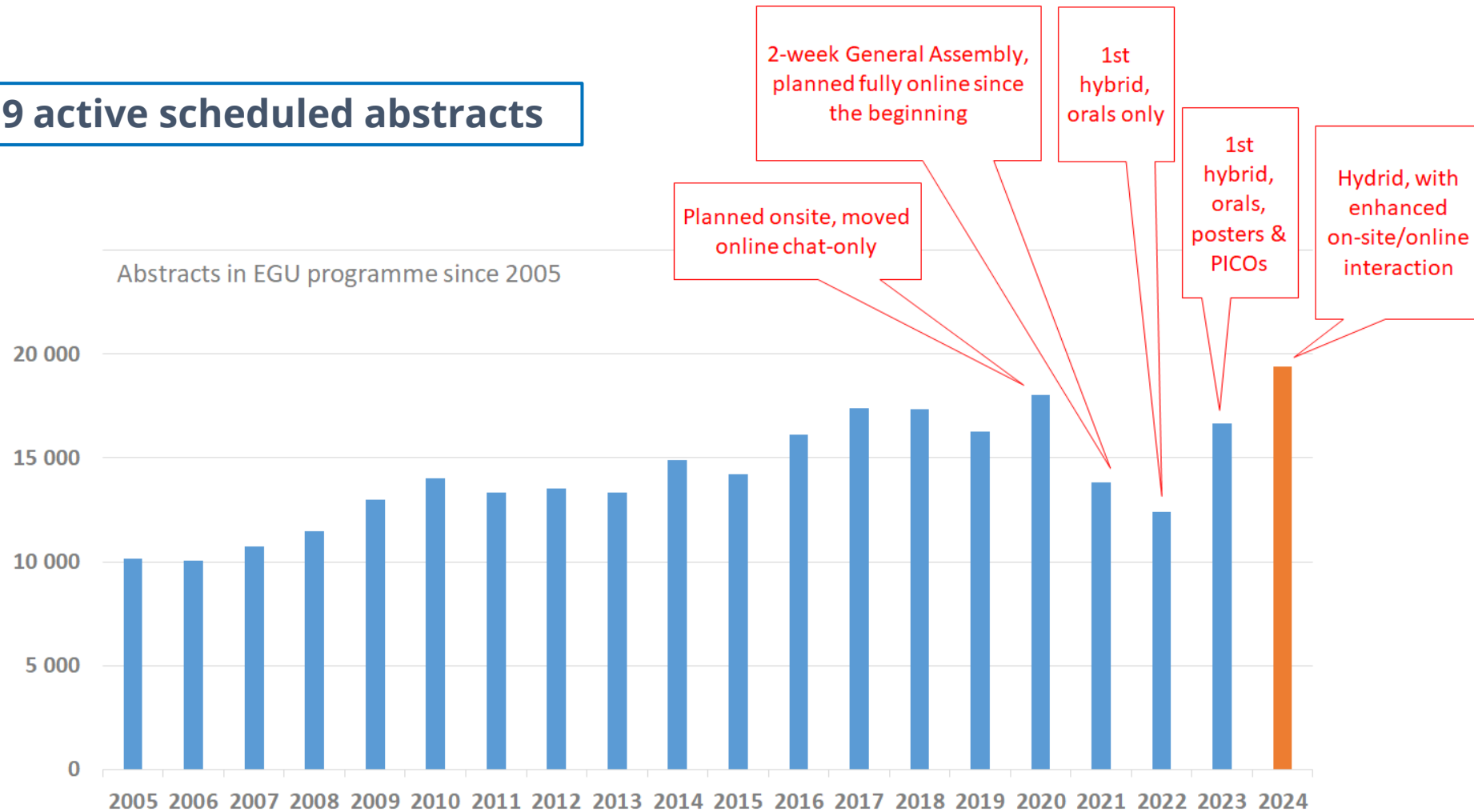
Jane Roussak

EVENTS MANAGER

[https://egu24.eu/about/programme\\_committee\\_composition.html](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

Compare with statistics of previous GAs:

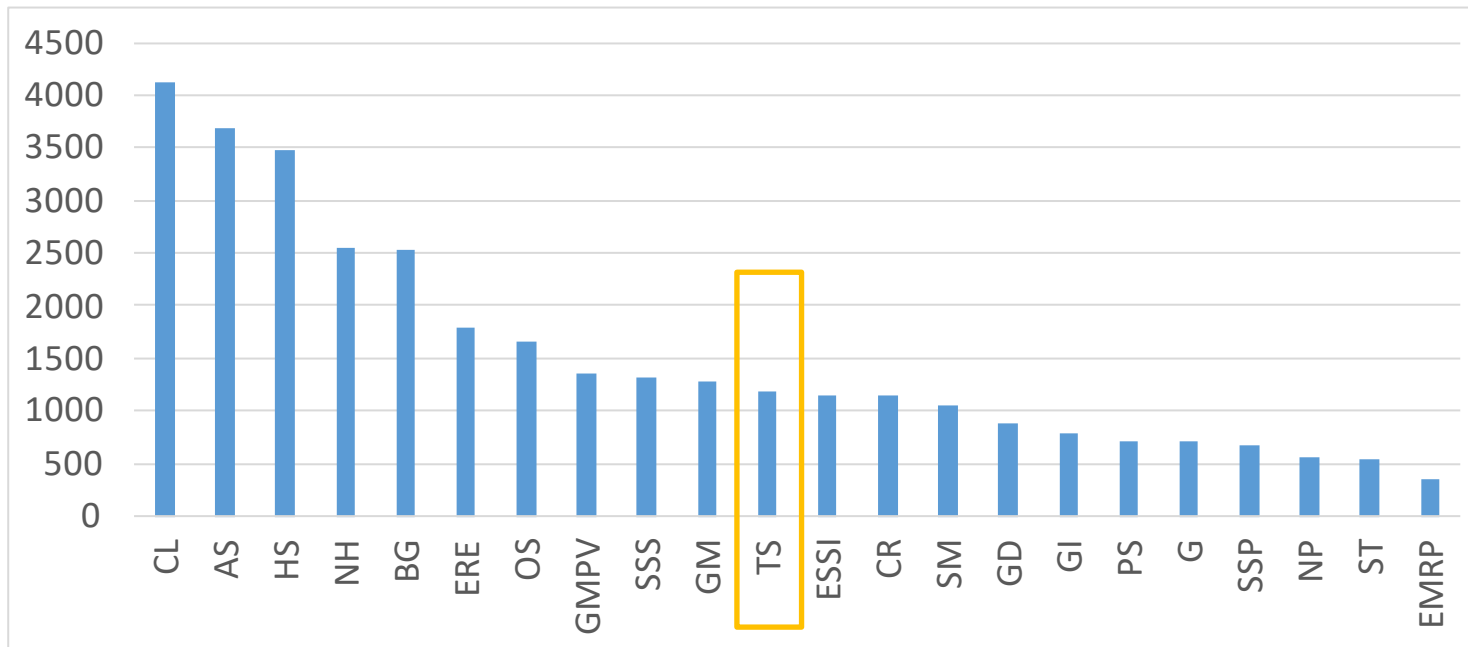
<https://www.egu.eu/meetings/general-assembly/meetings/>



## 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)



Vienna, Austria & Online | 14–19 April 2024

## 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**

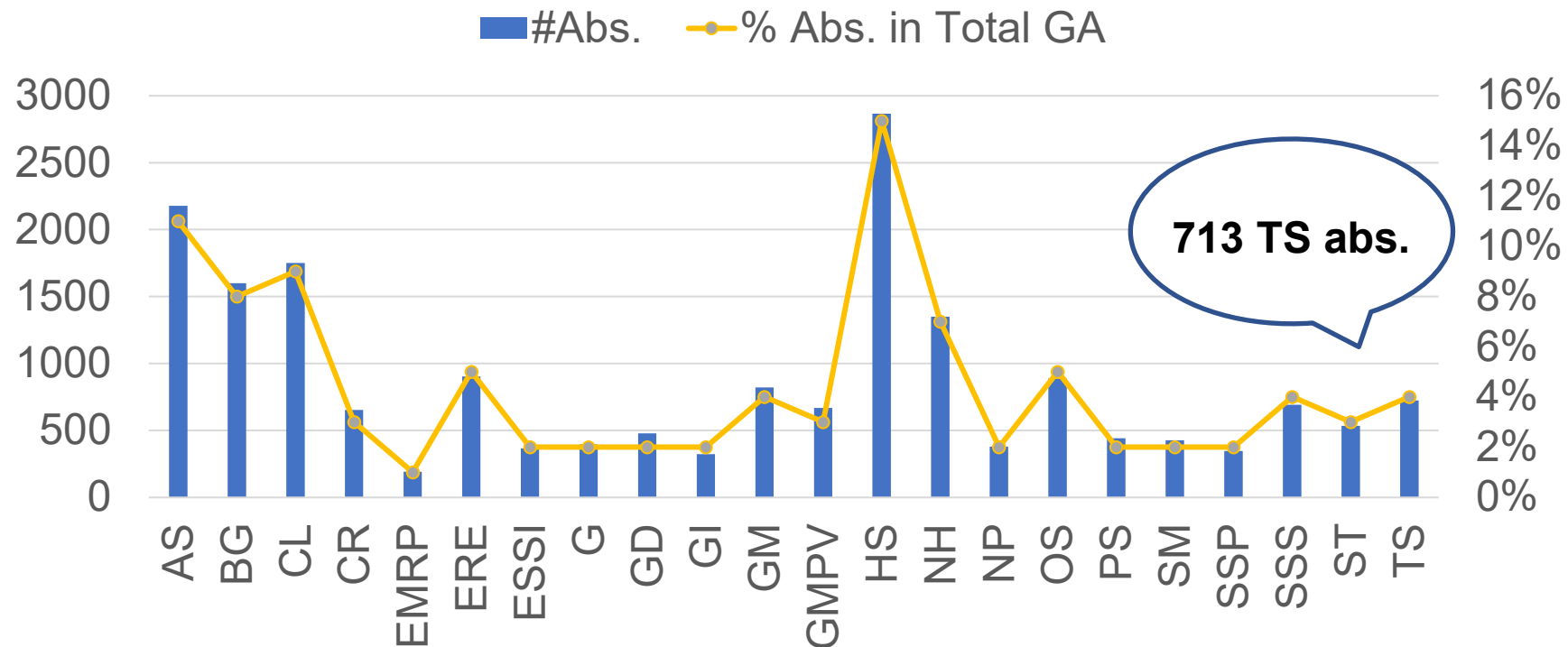


EGU23 oral presentation  
Photo credit: Pfluegl 2023

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

## EGU24: numbers at a glance

### Abstracts per Programme Group (PG)



(as of 24 March 2024)

# TS Division within EGU

Vienna, Austria & Online 23-28 April 2023

	Members	ECS
EGU	16,465 Abs	9,326 (57%)
TS Division	580 Abs	336 (58%)

**Vienna, Austria & Online 14-19 April 2024**

	Members	ECS
EGU	19,573 Abs	10,820 (55%)
TS Division	713 Abs	395 (55%)



**23% increase from last year**



# Some TS Program abstract statistics

	2024	2023	2022	2021	2019
Abstracts TS-led sessions	<b>713 (in 23 Sessions)</b> <b>395 by ECS – 55%</b>	580 (in 24 Sessions) 333 by ECS – 57%	446 (in 23 sessions) 279 by ECS – 67%	795	750
Abstracts including co-organized sessions	<b>998 (in XX sessions) 15 abstracts withdrawn</b>	1321 (in 53 sessions) 18 abstracts withdrawn	1092 (in 53 sessions) 39 abstracts withdrawn	1461	1543
Total abstracts	<b>19,573</b>	16,461	12,507	18,052	
TS contribution to the GA programme	<b>3.6% (5% with co-org)</b>	3.5% (8% with co-org)	3.6% (8.7% with co-org)	4.4% (8.1% with co-org)	

C

	Members	ECS
EGU	19,573 Abs	10,820 (55%)
TS Division	713 Abs	395 (55%)



**23% increase from last year**

In 2023 one session could have an oral slot with 21 abstracts (average)  
In 2024 one session could have an oral slot with 28 abstracts (average)

# How do we build the program?

Bottom-up – your input is extremely important!

- ‘Skeleton’-program: June
- **Open call-for-sessions: June to September**
- First session program (October)
- Call-for-abstracts
- Session merges... (January)
- Final session program (February)

# How do we build the program?

Please consider that it is VERY (!! ) easy to propose a session...but it implies possible later session merges...

Check what has already been proposed before proposing new sessions.

And...the GA is 5 days long from 08.30 on Monday to 19.00 on Friday. Sessions on Monday morning or Friday afternoon are not punishments, just part of the official program!





# Great Debates

**1. Plate motions were constant through geological time**

**Tuesday 16 April, 14:00–15:45 CEST Room E1**

**2. Does climate change affect earthquake risks?**

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

**#EGU24**



# Open Access Publications



- Open Access Journals
- Interactive Public Peer Review



[www.egu.eu/publications](http://www.egu.eu/publications)





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OPEN ACCESS

INTERACTIVE PUBLIC PEER REVIEW

ARTICLE LEVEL METRICS

MODERATE ARTICLE PROCESSING CHARGES

FINANCIAL SUPPORT

Executive editors: CharLotte Krawczyk (chief executive editor), Susanne Buitert, Andrea Di Muro, Federico Rossetti & Arjen Stroeven

eISSN: SE 1869-9529, SED 1869-9537

Solid Earth (SE) is a not-for-profit journal that publishes multidisciplinary research on the composition, structure, and dynamics of the Earth from the surface to the deep interior at all spatial and temporal scales.

open access as basic principle  
preprints for interactive  
discussion

Clarivate JIF 3.4

Clarivate JIF 5-year 3.6

Scopus CiteScore 6.5

Google h5-index 34

# Enter the journal through 4 thematic groups

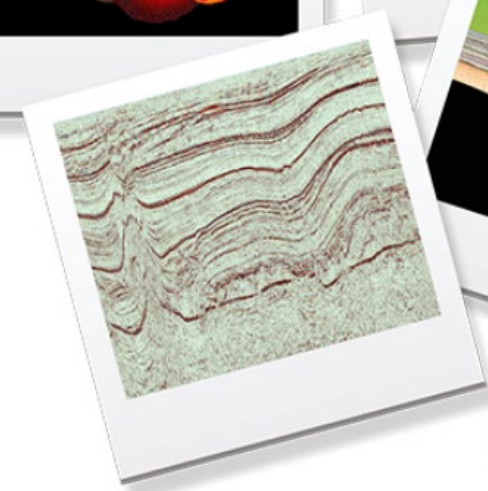
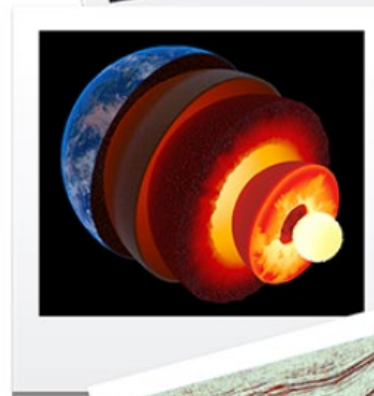
Tectonic plate interactions, magma  
genesis, and lithosphere deforma-  
tion at all scales



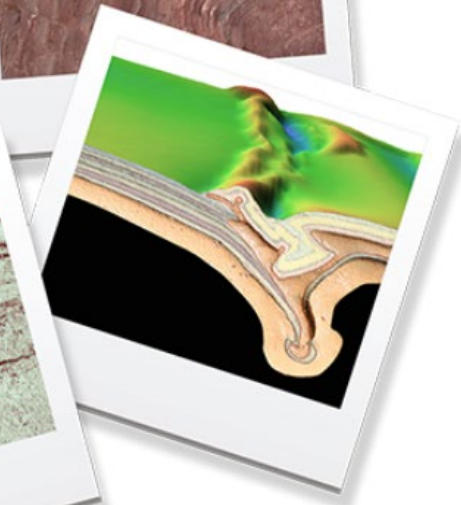
The evolving Earth  
surface: erosional,  
sedimentary, mor-  
photectonic, and  
volcanic processes



Core and mantle  
structure and  
dynamics



Crustal structure and  
composition



## Tectonic plate interactions

[Home](#) / [Tectonic plate interactions](#)



Relevant editorial teams:

- [Geodynamics, geodesy, gravity, and geomagnetism](#) | Buiter, Aubert, Dannberg, Gerya, Gillet, Lewi, Manda, and McClusky
- [Geochemistry, mineralogy, petrology, and volcanology](#) | Di Muro, Gottsmann, Lissenberg, Longo, Pinel, and Rey
- [Seismics, seismology, paleoseismology, geoelectrics, and electromagnetics](#) | Krawczyk, Beghein, Bianchi, Malinowski, Nissen-Meyer, Pilia, and Werban
- [Stratigraphy, sedimentology, geomorphology, morphotectonics, and palaeontology](#) | Stroeve, Gardin, Healy, Ogata, and Oliva
- [Structural geology and tectonics, paleoseismology, rock physics, experimental deformation](#) | Rossetti, Chu, Fousseis, Healy, Tavani, and Toy

### Recent papers

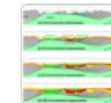
05 Apr 2024

[Extensional fault geometry and evolution within rifted margin hyper-extended continental crust leading to mantle exhumation and allochthon formation](#)

Júlia Gómez-Romeu and Nick Kuszniir

Solid Earth, 15, 477–492, <https://doi.org/10.5194/se-15-477-2024>, 2024

[▶ Short summary](#)



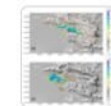
03 Apr 2024

[Lahar events in the last 2000 years from Vesuvius eruptions – Part 2: Formulation and validation of a computational model based on a shallow layer approach](#)

Mattia de' Michieli Vitturi, Antonio Costa, Mauro A. Di Vito, Laura Sandri, and Domenico M. Doronzo

Solid Earth, 15, 437–458, <https://doi.org/10.5194/se-15-437-2024>, 2024

[▶ Short summary](#)





# We welcome your submissions



## Was your preprint posted before?

Solid Earth (SE) allows you to submit either original preprints for initial posting and discussion on EGU'sphere, EGU's central preprint repository, or preprints that were already posted on a preprint server seeking public discussion on EGU'sphere. In both cases, after the public discussion on EGU'sphere, the handling editor decides on a possible final journal publication in SE. Please select from the options below.

- My preprint has not been posted anywhere, and I seek public discussion on [EGU'sphere](#), EGU's preprint repository
- My preprint has already been posted on a preprint server, and I seek public discussion on EGU'sphere

Proceed

### Chief-executive editor

CharLotte Krawczyk

GFZ German Research Centre for Geosciences  
Germany



### Executive editors

Susanne Buitter

GFZ Helmholtz Centre Potsdam  
Germany



Andrea Di Muro

Claude Bernard Lyon1  
Earth Sciences  
France



Federico Rossetti

Università Roma Tre  
Dipartimento di Scienze  
Italy



Arjen Stroeven

Stockholm University  
Department of Physical Geography  
Sweden



### EGUsphere topic selection

Please select one or more topics matching your preprint.

- Natural hazards ▾
  - General topics in natural hazards
  - Hydro-meteorological hazards
  - Volcanic hazards
  - Landslide hazards
  - Earthquake hazards
  - Sea & ocean hazards
  - Remote sensing & hazards
  - Wildfire hazards
  - Environmental, biological, & natech hazards
  - Natural hazards & society
  - Multi-hazards
  - Interdisciplinary topics in natural hazards
- Nonlinear processes in geosciences ▾
- Ocean sciences ▾
- Planetary & solar system sciences ▾
- Seismology ▾
  - General topics in seismology
  - Seismic instrumentation and infrastructure
  - Real-time and time dependent seismology
  - Deformation, faulting, and earthquake processes (incl. seismotectonics, geodynamics, earthquake source physics)
  - Seismic imaging across scales (from near-surface to global scale, incl. methodological developments)
  - Crustal fluids & seismic activity (incl. induced & triggered seismicity, volcano seismology)
  - Seismic hazard assessment (earthquake forecasting, engineering seismology, seismic, and/or multihazard probabilistic assessment)
  - Computational, theoretical seismology and big data
  - Interdisciplinary topics in seismology
- Stratigraphy, sedimentology, & palaeontology ▾

### Manuscript specification

Companion paper(s):  or

Multiple manuscript numbers must be separated by commas. ?

Manuscript type:

### Journal subject areas & alert specification

#### First choice\*

Subject area:  Editorial team:

#### Second choice

Subject area:  Editorial team:

### Referee suggestion \*

You are strongly encouraged to suggest referees considering under-represented den different career stages, with particular attention to the participation of Early Career S

A blue-tinted landscape featuring a waterfall on the left side, with water cascading over rocks. The background shows a wide, flat expanse, possibly a dry lake bed or a coastal plain, under a cloudy sky. A large yellow speech bubble is centered in the upper half of the image, containing the text 'Please Give Us Feedback!'.

**Please  
Give Us  
Feedback!**

[egu24.eu/feedback](https://egu24.eu/feedback)

# EGU25 GA in Vienna

**27 April-2 May**

Thank you and enjoy the meeting!