

ESSI Division Meeting

Jens Klump, ESSI Division President

20 April 2021



Meetings | Publications | Outreach | www.egu.eu

vEGU21: Sessions and abstracts, Schedule

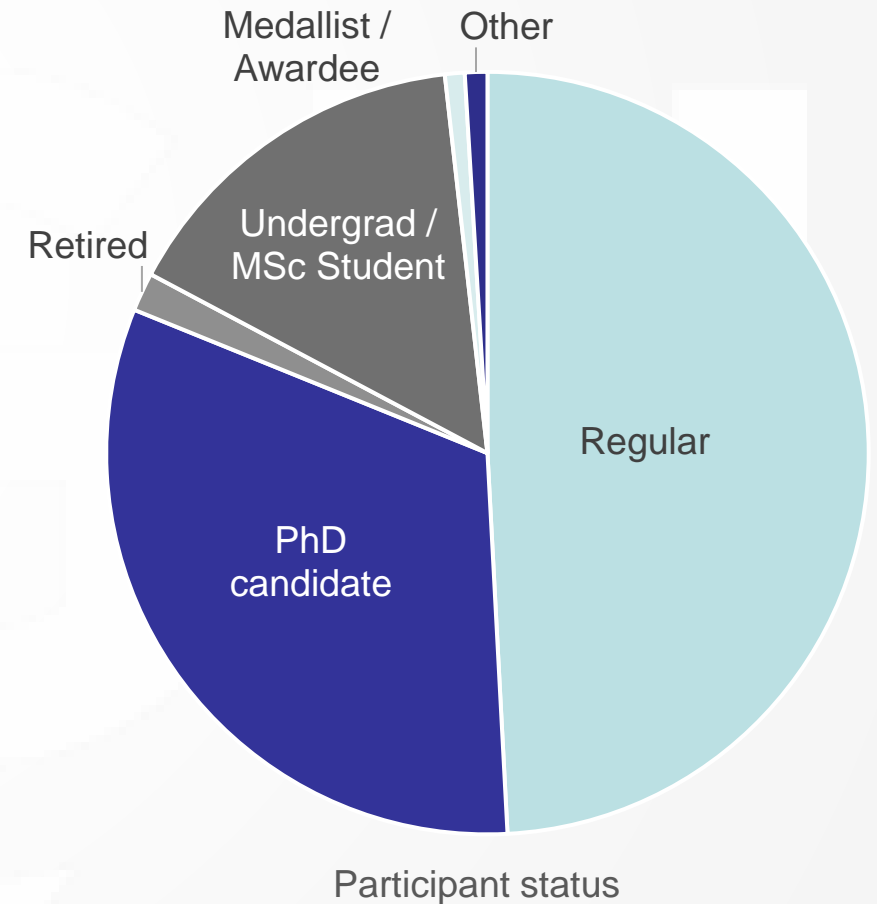
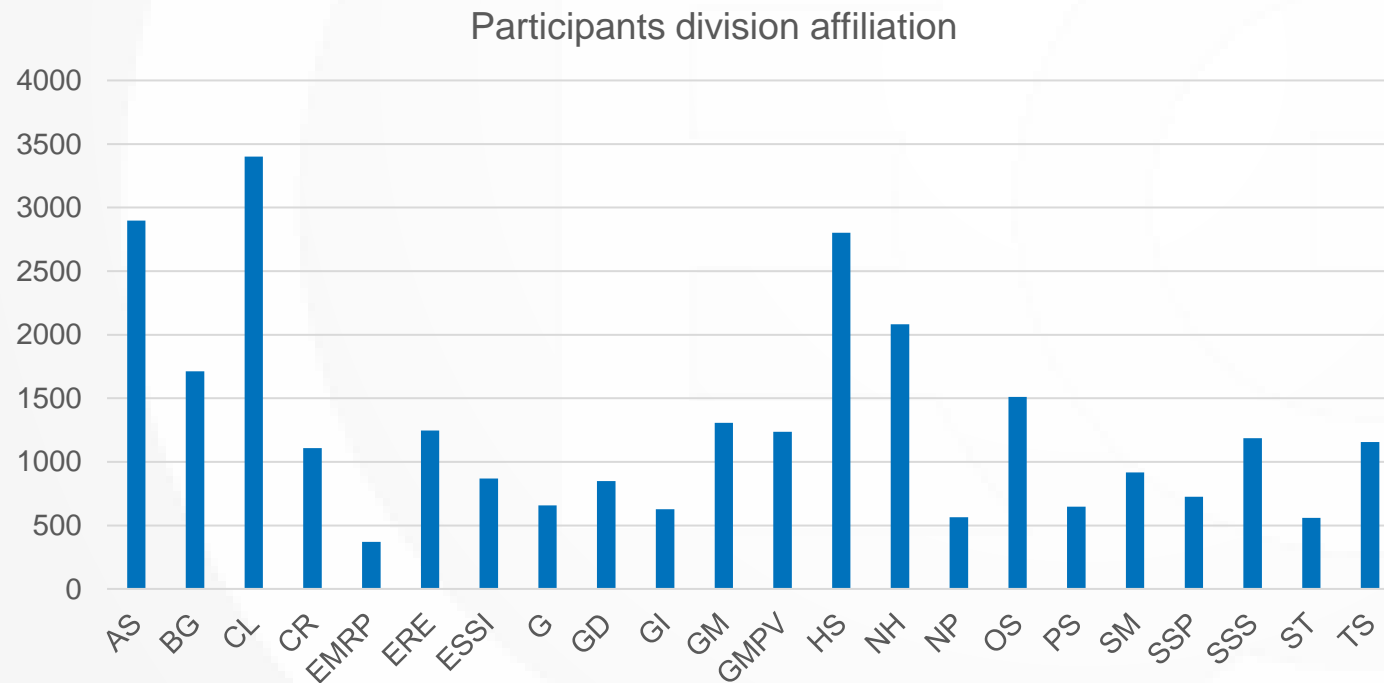
- 13,801 abstracts in programme | -24% relative to 2020
- 843 active sessions | 636 vPICO sessions | 56 Short Courses | 32 Medal and Award Lectures
- Week 1 (19-23 Apr): Union Symposia | Great Debates (Except GDB1) | most Medal and Award Lectures | most Division Meetings | 2 Short Courses per day
- Week 2 (26-30 Apr): 38/39 parallel vPICO sessions | 4 Short Courses per day
- Networking Events (including pop-ups), Townhall Meetings, Side Events during both weeks
- EGU Plenary 19 Apr | Medal & Award celebration 22 Apr | Closing party 30 Apr

vEGU21: ESSI Events

- MAL8 | Ian McHarg and ESSI ECR Award | 20 Apr 2021 | 10:15 – 12:15
- DM7 | ESSI Division Meeting | 20 Apr 2021 | 13:30 – 14:30
- GDB3 | Improving Research Software in the Geosciences | 22 Apr 2021 | 15:00–16:30
- NET12 | ESSI ECR Event | 27 Apr 2021 | 12:00 – 13:00
- NET30 | ESSI Networking Event | 29 Apr 2021 | 12:30 – 13:30
- 11 Sessions led by ESSI, 20 Sessions co-organised
- Check out other Great Debates and networking events!

vEGU21: Registration numbers and breakdown

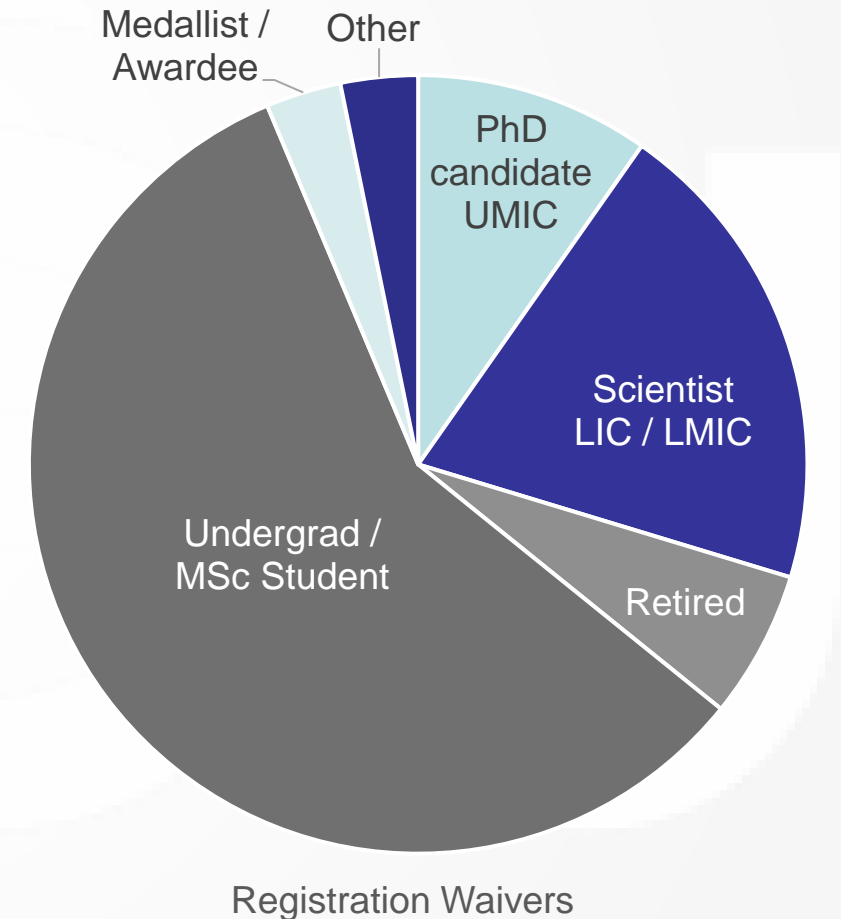
- 13,982 registrations (17 April 2021, 11:30)
- Participants from 126 countries



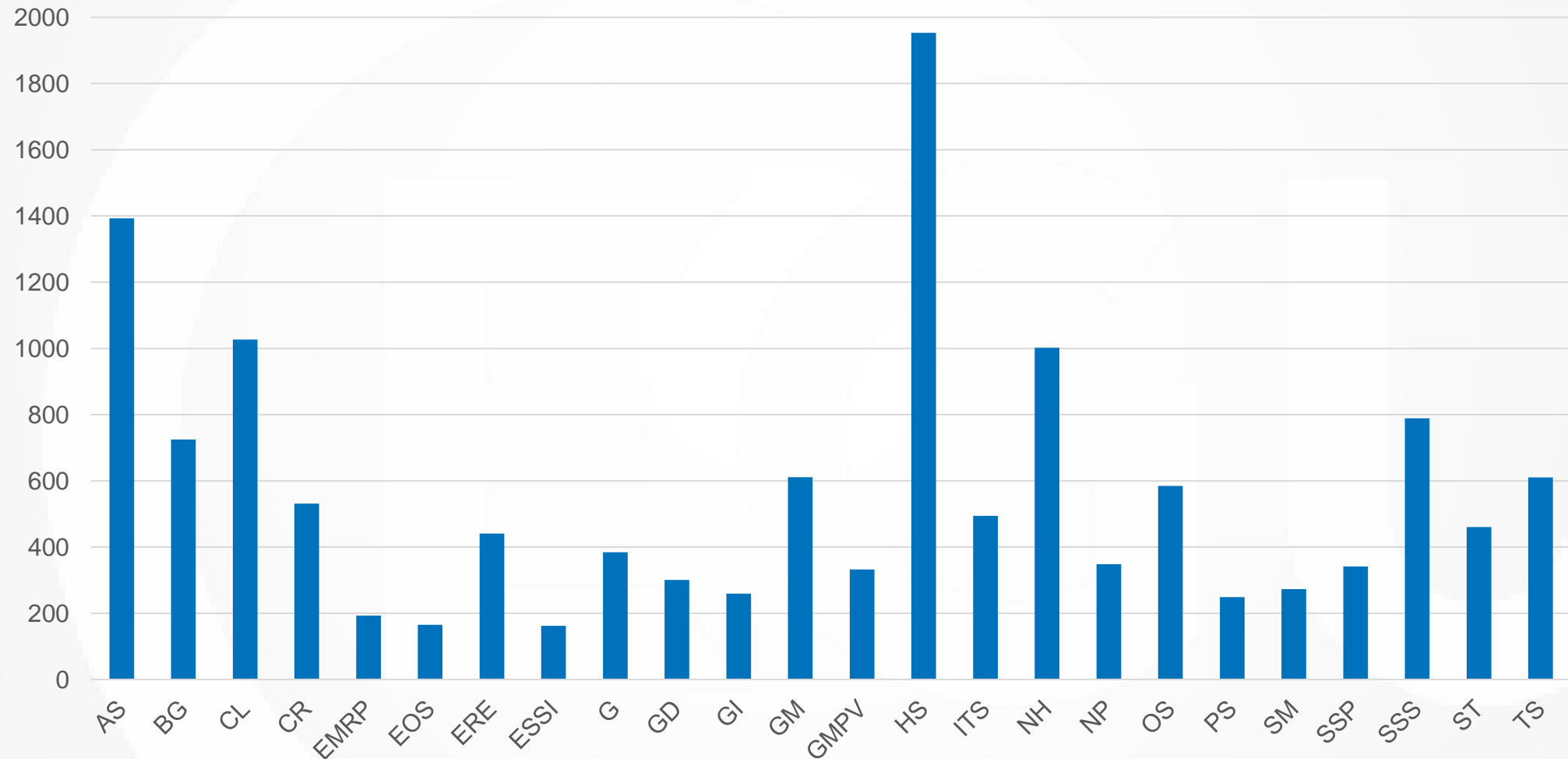
vEGU21: Registration fee waiver programme

- 3,675 registration waivers granted:
 - All scientists from Low / Lower-Middle Income Countries*
 - PhD candidates from Upper-Middle Income Countries*
 - Undergraduate and Master Students
 - Retired members of EGU
 - Medallists
 - Others (Teachers, Journalists, ...)

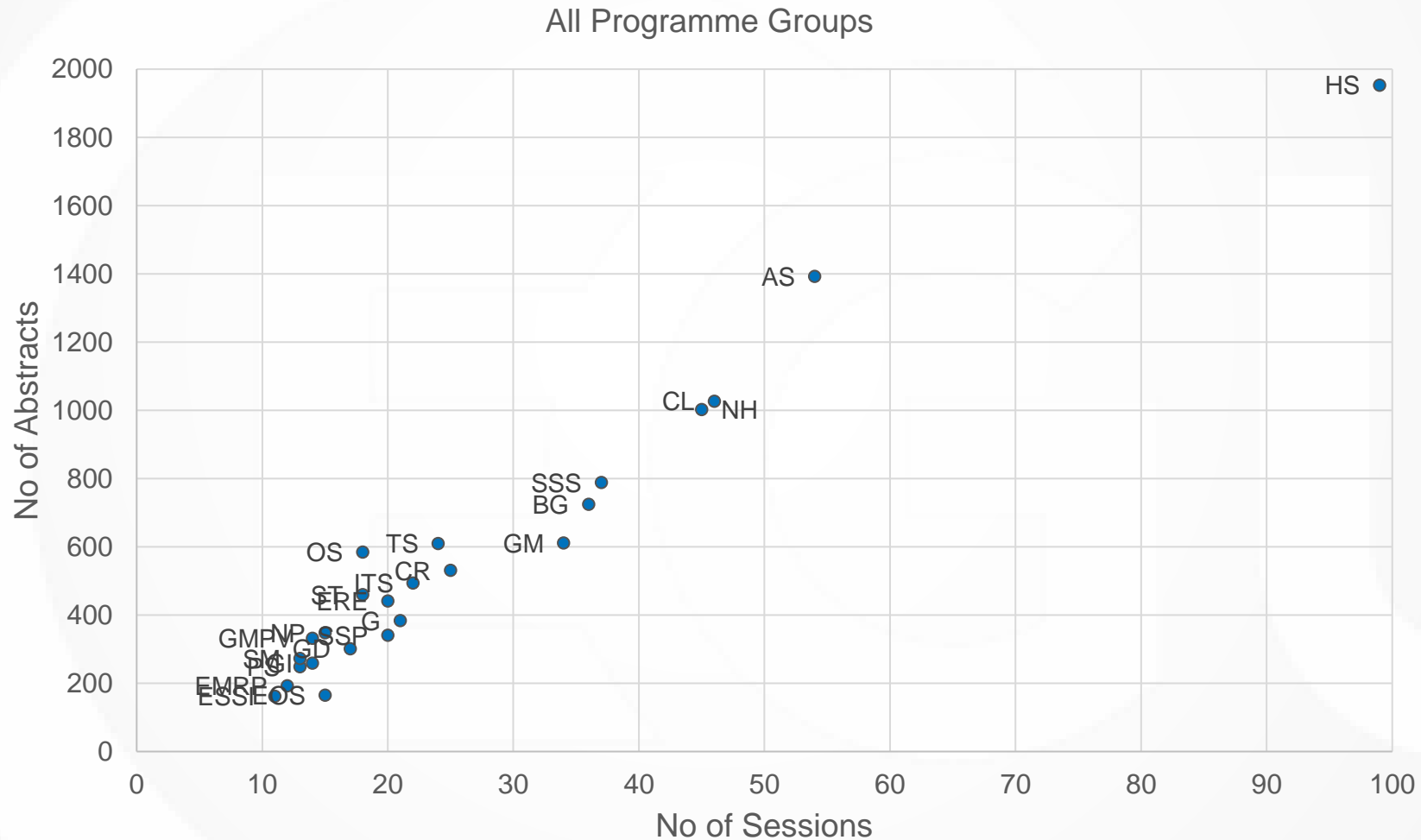
* World Bank Definition



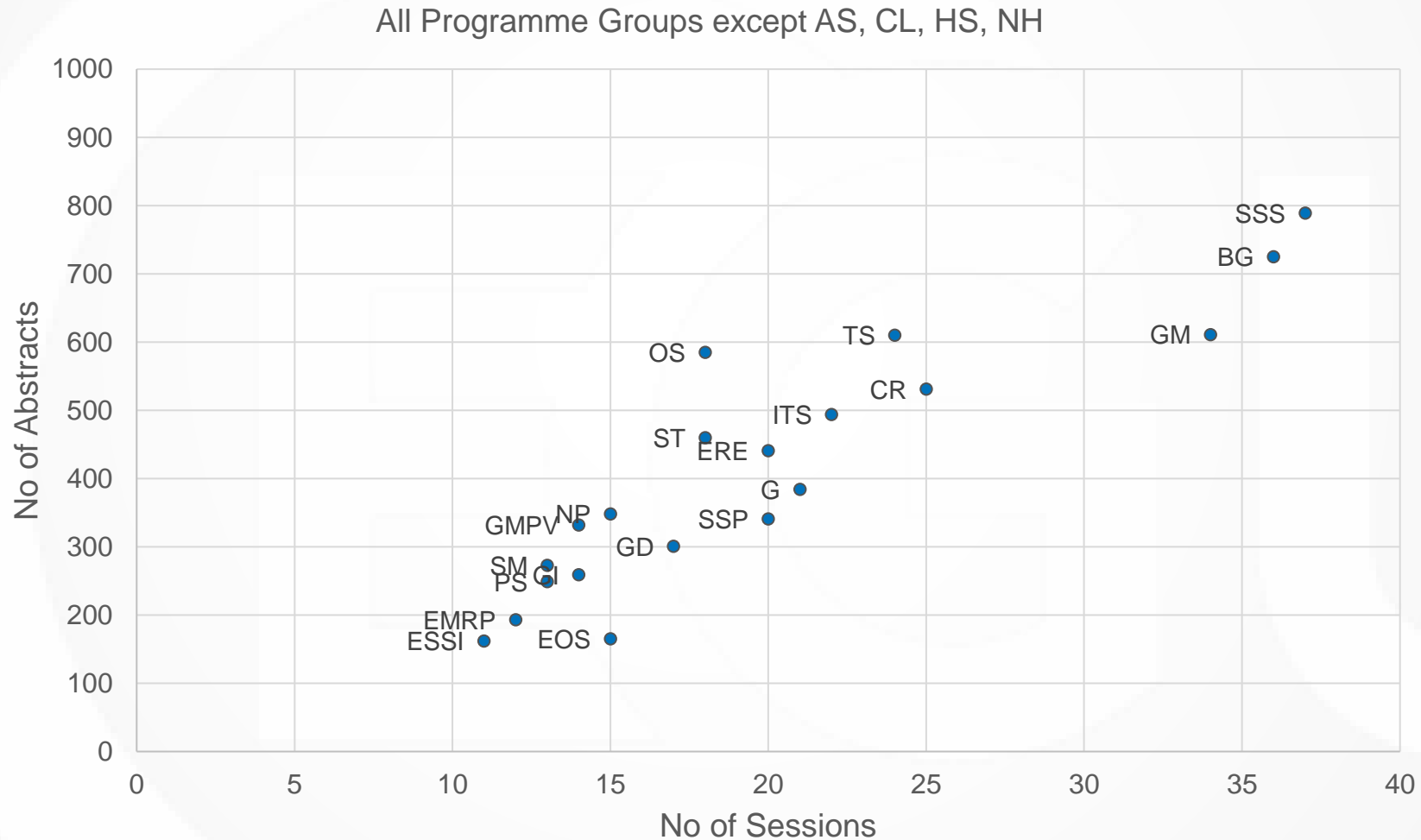
vEGU21: Abstracts per Programme Group



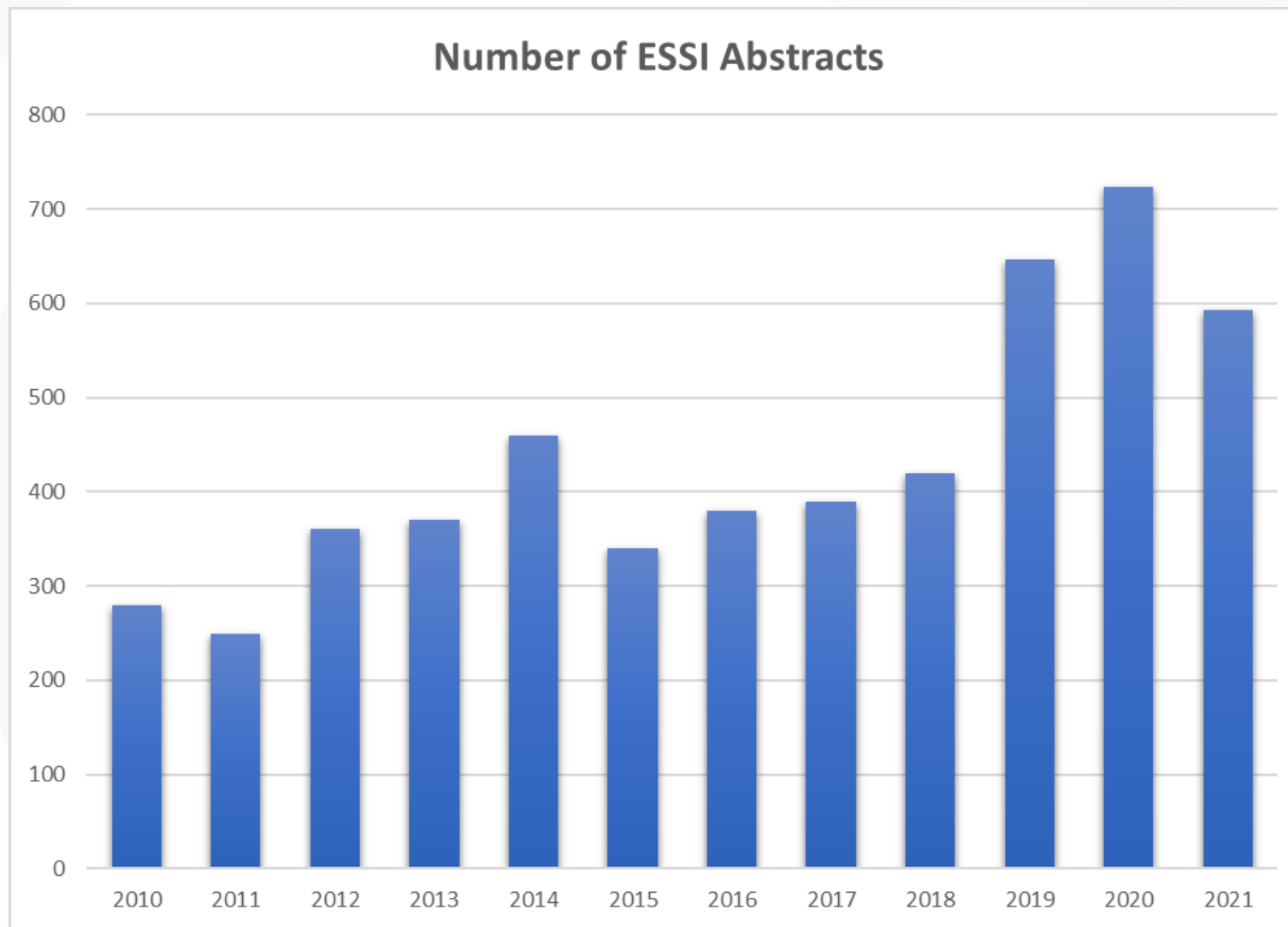
vEGU21: Abstracts / Sessions per Programme Group



vEGU21: Abstracts / Sessions per Programme Group



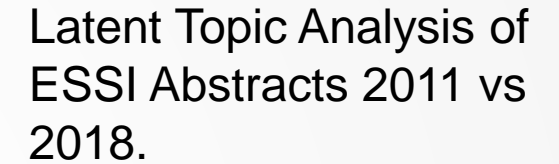
vEGU21: ESSI Abstracts



vEGU21: ESSI Programme in Numbers

- Great Debate: 1
- ITS: 4
- ESSI1 (Disciplinary): 4 | co-organised: 11
- ESSI2 (Infrastructures): 3 | co-organised: 4
- ESSI3 (Open Science): 3
- ESSI4 (Visualisation): 1

- Proposed: 21
- Rejected: 1
- Accepted: 11



Applications of Latent Semantic Analysis to Track Trends in Geoscience Research. Geophysical Research Abstracts, **21**, EGU2019-16742-1

- **ESSI 1: Community-driven challenges and solutions dealing with Informatics**
 - Kerstin Lehnert
 - Dirk Fleischer
- **ESSI 2: Infrastructures across the Earth and Space Sciences**
 - Horst Schwichtenberg
 - Wim Som de Cerff
 - Paolo Mazzetti
- **ESSI 3: Open Science 2.0 Informatics for Earth and Space Sciences**
 - Kirsten Elger
 - Pierre Philippe Mathieu
- **ESSI 4: Visualization for scientific discovery and communication**
 - Jon Blower
 - Mohan Ramamurthy
- **ESSI 5: General contributions**

ESSI Division Structure: Leadership



Jens Klump
Division President
2020 – 2023



Jane Hart
Deputy Division President
2020 – 2023

ESSI Division President: next election

- Next EGU election (Divisions): November 2021
- Successful candidate: deputy president from EGU GA 2022 (1 year)
- Assumes role of Division President at EGU GA 2023 (2 years)
- All EGU members are eligible
- Division President can only stand once for re-election (usually 4 years in total)
- Call for candidates opens June 2021

ESSI Division Structure: Science Officers

- Meteorology and Climatology Reinhard Budich
- Space *Vacant*
(Pier Giorgio Marchetti)
- Geochemistry Kerstin Lehnert
- Oceanography Antonio Novellino
- Liaison AGU ESSI Section *Jane Hart* (Peter Fox)
- Science Officers should promote sub-programmes and encourage their colleagues to organize sessions for the GA
- Any new volunteers?

ESSI Early Career Scientist (ECS) Representative

- Early Career Scientist: EGU member receiving highest degree (BSc MSc or PhD) in last 7 years
- Early Career Scientist representatives are a crucial link between the EGU and the young scientist community
- Each division can have an Early Career Scientist representative



Ph.D. in Innovation and Sustainable Development Engineering

Currently Postdoctoral Research Fellow in Environmental Data Mining at the University of Lausanne

Short bio

My research interest is the study of the interaction between spatial and temporal components of environmental and geographical phenomena, and their consequences in terms of spatial planning and urban geography. My recent work has focused on the analysis of land use dynamics and its relationship with climate, pollution, natural hazards and other social/economic phenomena. I collaborate with the Italian association "[Liberascienza](#)" to support their science communication activities.

Motivation

The ESSI division is growing, and so is the number of ECS in it. I expect to contribute to construct a clear portrait of ECS needs and expectation, helping to develop activities that can support the promotion of their research, a wider comprehension of the Division and General Assembly structure, and the creation of a real community that keeps in touch throughout the entire year and not only during the general assembly.

Early-Career Scientist Events at vEGU21

- 56 Short courses
 - 34 Short courses ECS as head-convener
- 21 Networking event led by and aimed at ECS
- 3 Great Debates led by ECS
- Jobs and Career Center initiatives
 - Meet the exhibitors
 - Meet the Talents
 - Blog on CV writing
 - Online CV-sticker
- Outreach
 - Introducing ECS Reps via EGU Blog
 - Blogs and Social Media blurbs about ECS-events

**Come and meet experts working at the interface of science & policy
at a [#vEGU21 networking session!](#)**

Science for Policy Meet and Greet: 26 April, 16:00

Science-policy pairing scheme: a panel discussion: 27 April, 16:00

**Practice pitching your policy ask to a
policymaker:
28 April, 17:00**



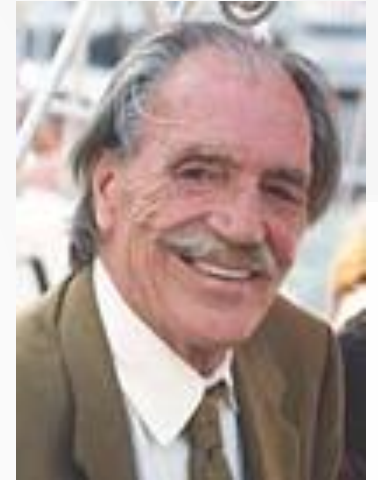
How can scientists effectively engage with policy? Find out during these [#vEGU21 Short Courses!](#)

- [Your Handbook to Science for Policy](#): 27 April, 10:00
- [How to influence policy through engaging with Parliaments](#): 28 April, 16:00



ESSI Awards: Ian McHarg Medal

- ESSI Division Medal
- Awarded for distinguished research in Information Technology applied to the Earth and space sciences.
- In recognition of the scientific achievements of Ian McHarg
 - a pioneer of the concept of ecological planning
 - provided the basic concepts of Geographic Information Systems (GIS)



<https://www.egu.eu/awards-medals/portrait-ian-mcharg/>

ESSI Awards: Our medallists



2020
Paul Wessel



2019



Stefano Nativi

2018



Kerstin Lehnert

2016



Helen Graves

2013



Alessandro Annoni

2012



Peter Fox

2011



Monique Petitdidier

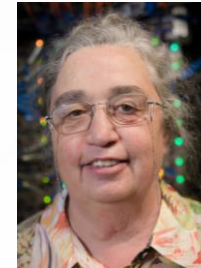
Peter Arthur Fox (1959 – 2021)

- » It is with the deepest sadness that EGU reports the death on 27 March 2021 of Dr. Peter Fox.
- » Peter Fox was a pillar of the global informatics community and pivotal in establishing the ESSI divisions within both EGU and AGU.
- » In 2012, his peers recognised this contribution when they awarded him the EGU's Ian McHarg Medal for his role in establishing informatics as a genuine discipline within the Earth Sciences.



Ian McHarg Medal committee

- Lesley Wyborn (chair)
- Paolo Diviacco
- Paolo Mazzetti
- Kerstin Lehnert
- Stefano Nativi
- **Paul Wessell**



Proposed change: McHarg – * Medal

- Format change - biennial starting 2021
- Expand scope
 - include technological advances e.g. software development
 - new approaches e.g. promoting open science
- Renamed to support diversity in EGU/ESSI and highlight new format



Outstanding Student and PhD candidate Presentation (OSPP) Awards

- This year, all participants are eligible for the contest, as long as they are the first and presenting author of the vPICO, and are either currently a BSc or MSc student or a PhD candidate, or obtained their degree after 1 January 2020.
- All vOSPP participants are clearly indicated as such in the final programme. It is therefore not necessary this year to integrate the OSPP label into the presentations.
- All registered EGU participants are invited to vote on vOSPP presentations, as long as they are neither BSc or MSc students or PhD candidates themselves, are not participating in vOSPP, are not a co-author of the presentation, and do not share the same affiliation as the first author.
- The shortened evaluation form is directly integrated into the online presentation page for easy access and only refers to the uploaded content for judging.
- It is this year therefore not necessary for session conveners to appoint judges, since all participants are allowed to judge. Conveners are, however, explicitly asked to vote on vOSPP presentations within their session and to invite session participants to do the same.

A wide-angle photograph of a large conference hall with a high ceiling and large windows. People are seated at round tables, and a stage is visible in the background with a large screen and blue curtains.

DIVISION OUTSTANDING EARLY CAREER SCIENTIST AWARDS 2021

Alice Fremand



The 2021 Division Outstanding Early Career Scientist Award is awarded to Alice Fremand for her major contributions towards establishing the data centre for geothermal data in Alsace (Centre de Données de Géothermie Profonde, CDGP) as a state-of-the-art research data repository.

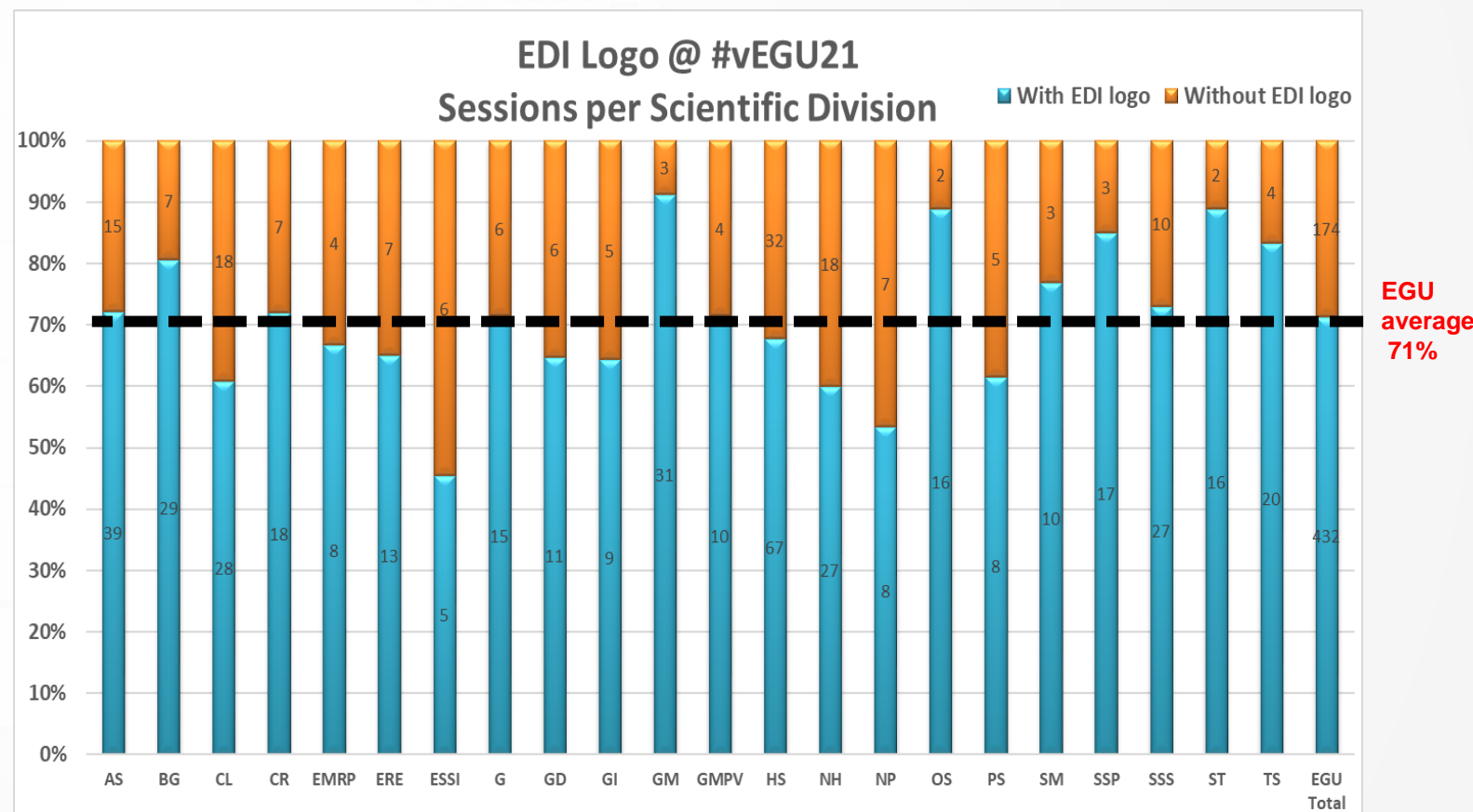
Equality, Diversity and Inclusion (EDI) Events at vEGU21

- SC2.8 Promoting Diversity in Geosciences | 19 Apr 10:00 – 11:00 CEST
- SC2.9 Practical Recommendations on how to combat discriminatory work environments in the Geosciences | 19 Apr 14:30 – 15:30 CEST
- EOS5.1 Promoting and supporting equality, diversity and inclusion in the geosciences | 26 Apr 11:00 – 14:15 CEST
- GDB5 Bullying in Academia: towards creating a healthy and safe working environment (ECS Great Debate) | 22 Apr 09:00 – 10:30 CEST
- GDB1 Challenging discrimination in the geosciences: Amplifying unheard voices | 26 Apr 15:00 – 16:30 CEST
- NET0 Picture a Scientist Film Screening | 24 - 26 Apr
- EDI Networking Event | 26 Apr 17:00 – 17:30 CEST
- EGU Pride | 19 Apr 17:30 – 19:00 CEST
- EGU EDI Colouring Book



Session conveners fulfill all three criteria:

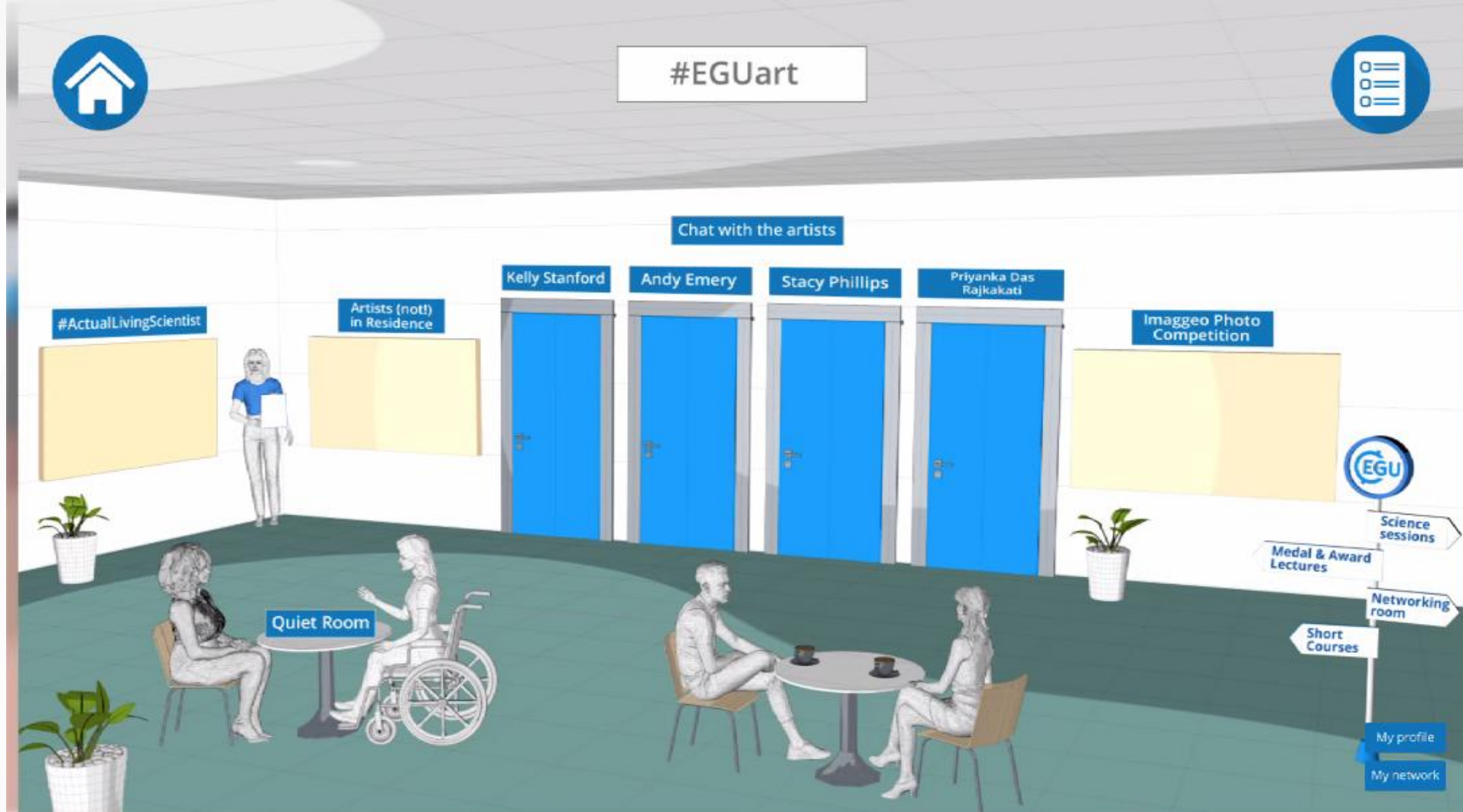
1. Include conveners from **multiple countries and institutes**
2. Have conveners from **different career stages**, including at least one ECS
3. Include conveners that represent **more than one form of gender identity**



Send suggestions to: edilogo@egu.eu

#EGUart

- 4 artists (not!) in residence
- #EGUart room in platform
- #ActualLivingScientist (EDI initiative)
- Colouring book (EDI initiative)
- Imaggeo photo competition
- Kids Art



#vEGU21 Networking

- Scheduled networking events (Division, ECS, etc.), including on Gather.town
- Pop-up networking events
- EGU committee meet & greets
- Viennese settings (café, art exhibits, cooking)
- Quiet room (Spotify playlist)
- vEGU21 platform built-in networking capabilities (networker, handshake)



#vEGU21 outreach activities

- **EGU Public Lecture:** Günter Blöschl, Vienna University of Technology and previous EGU President, 21 Apr 18:00 CEST; link on EGU and vEGU21 websites. The lecture is hosted and organised by the Austrian Academy of Sciences.
- **EGU Mentoring:** 130 mentees successfully paired with 83 mentors.
- **Croome & Krafft award presentations** 20 Apr 18:00 CEST
- **Teaching/scientist pairing scheme** pilot project

#vEGU21 Media activities

- 6 press conferences
- New: **media highlights page**
- New: **5 press releases**
- New: **5 media tip sheets**
- Every PG represented in these materials!

Media at vEGU21
Worldwide | 19–30 April 2021

Media highlights

[Home](#) / [vEGU21 Press Centre](#) / Media highlights

Site search



The evolution of feathers

Birds are covered in feathers, but they are not the only animal to sport a colorful coat. Dinosaurs once did too, according to recent scientific findings. Researchers have uncovered fossils that show feathers existed 100 million years ago and were likely on all dinosaur groups.

[Michael Benton](#), paleontologist at the University of Bristol, UK, [presents](#) research on **Tuesday, 20 April at 15:05 CEST** covering the evolution of feathers, including how paleontologists are detecting colours and patterns of dinosaur feathers. He will also discuss new frontiers of research in paleobiology.



Dinosaurs that are 100 million years old show evidence of feathers. Scientists have discovered that *Sinosauropteryx* had ginger and white rings of feathers down its tail. Image credit: Sam / Olai Ose / Skjaervoy, CC 2.0, Flickr.

Lessons learned when an earthquake struck during the pandemic



The deadliest earthquake of 2020 occurred amid the global COVID-19 pandemic. When a magnitude-6.9 quake struck the eastern Aegean Sea in October, 119 people died in Turkey and Greece, predominantly from buildings collapsing. It was the scene emergency responders and natural hazards scientists had feared: a major quake occurring during the pandemic.

Normal actions immediately following an earthquake — like search and rescue, first-aid treatment, and setting up emergency shelters — were riskier and more challenging because of COVID. For example, responders needed proper personal protective equipment, especially facemasks, and the affected

ESSI on social media



@EGU_ESSI

Find the EGU on





ESSI web pages and blog



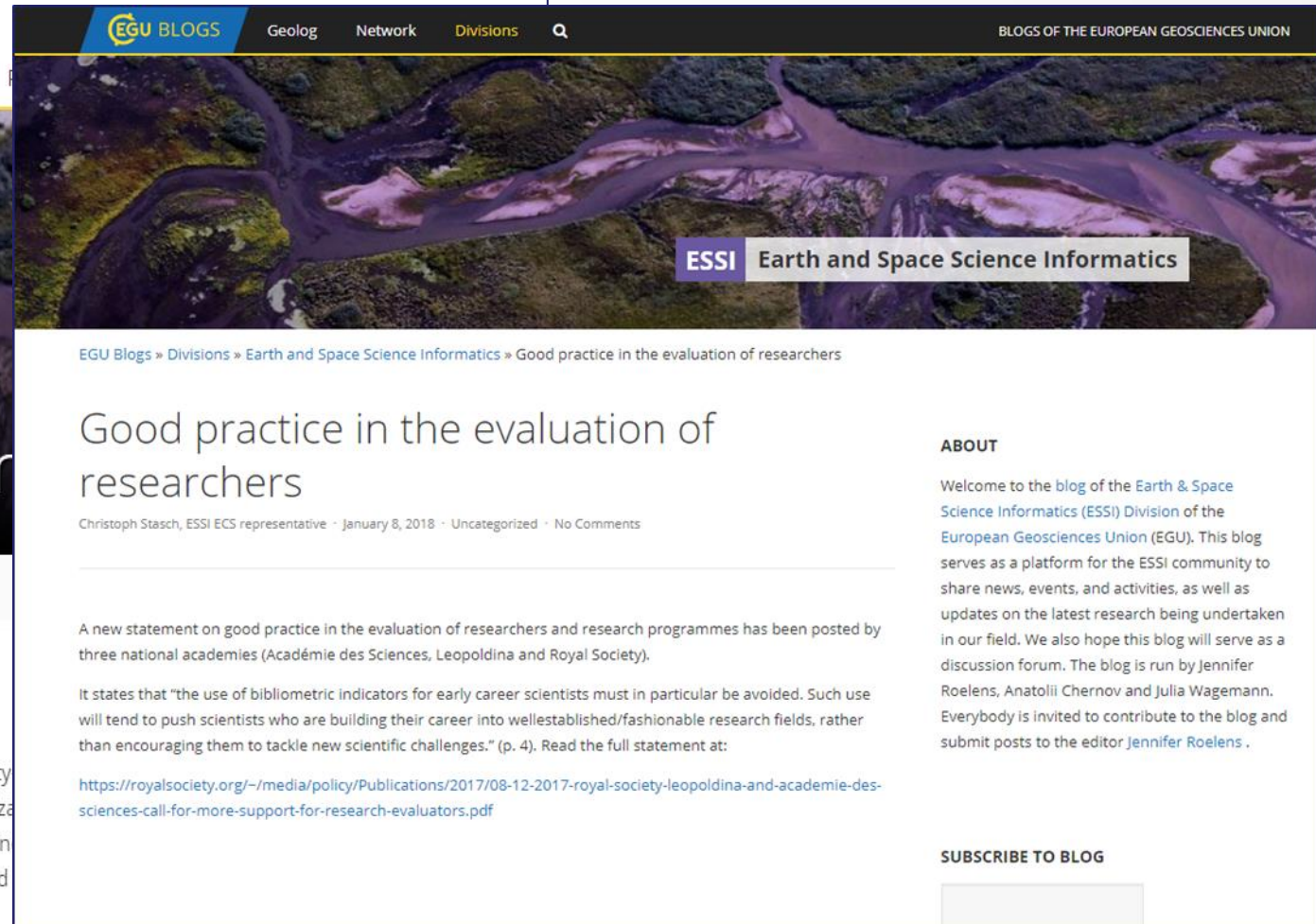
[Home](#) / [ESSI](#)

President: Helen M. Glaves (essi@egu.eu)

Deputy President: Jens Klump (jens.klump@csiro.au)

As far as informatics and information technology are concerned, the ESSI division deals with Community multidisciplinary challenges and solutions. This includes topics like: data model and metadata standardization, data infrastructure interoperability, semantics services, quality and uncertainty information encoding and propagation, geospatial data processing, environmental model accessibility, big data management, and visualization for scientific discovery.

H. Glaves (143820) | [Home](#) | [General Assembly 2018](#) | [Divisions](#)



- [ESSI mailing list](#)
- [ESSI-ECS mailing list](#)

ESSI Division Meeting

Thank you!

20 April 2021



Meetings | Publications | Outreach | www.egu.eu