

Division Meeting

Seismology

P. Martin Mai (sm@egu.eu)

General Assembly 2018 | Wednesday, April 11



Meetings | Publications | Outreach | www.egu.eu

Agenda & Topics

- Welcome
- Awards & Medals
- Meeting & Session Statistics
- Structure of the Seismology Division
- Any other business

Beno Gutenberg Medal 2018

The 2018 Beno Gutenberg Medal is awarded to **Haruo Sato** in recognition of his outstanding contributions to seismology and the development of new insights into stochastic properties of Earth structure through theoretical and observational studies of scattered seismic waves.



Prof. Haruo Sato
Tohoku University, Japan



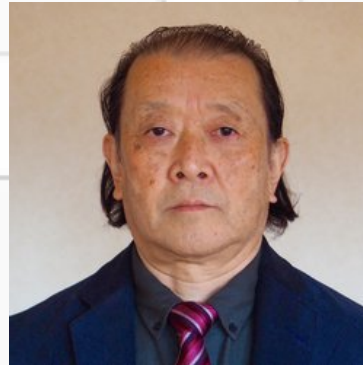
Beno Gutenberg.

Beno Gutenberg Medal 2018

Medal Lecture – Thursday, April 12, Room G1 – 19:00

followed by a sponsored reception **

Statistical Approach to the Propagation of Seismic
Waves through the Random Structure of the Earth

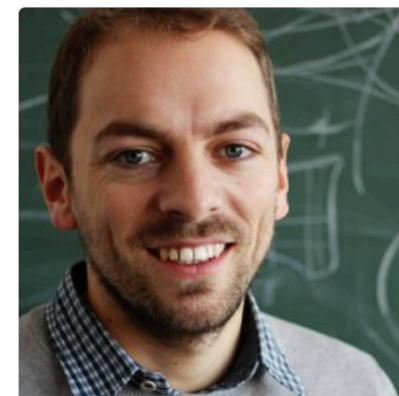


Division Outstanding Young Scientists Award 2018

The 2018 Division Outstanding Early Career Scientists Award is awarded to **Martin van Driel** for exceptional research in modeling and understanding global broadband seismic wave propagation.

Following his early research on rotational and volcano seismology, Martin van Driel developed the first numerical tool for the simulation of seismic wave propagation across the complete frequency range observed on the global scale. For this, he independently developed theories for fully anisotropic wave propagation in axisymmetric media and the broadband simulation of visco-elastic attenuation. This work, largely performed during his PhD, constitutes a breakthrough in computational seismology. Van Driel also invested much energy into making his codes user-friendly and available to the community (www.instaseis.net) for teaching and research.

He is one of very few seismologists who perfectly master both theory and data, which is reflected in the topical bandwidth of his publications. This breadth combined with his unrelenting and unselfish effort to advance the seismological community make him a very well-deserved recipient of this award.



Martin van Driel

Monday, 09 Apr 2018 (SM Division Outstanding ECS Award Lecture): *Removing bottlenecks in geophysical finite-element modeling through advanced hexahedral meshing*

Outstanding Student Poster & Pico Award 2017

The 2017 Division Outstanding Student Poster & Pico (OSPP) Awards

Nienke Blom



Imaging density in the Earth and the construction of optimal observables

Baptiste Gombert



A Bayesian analysis of the Mw 7.8 Pedernales (Ecuador) earthquake

Nominations for OSPP Award

Eligible for the Outstanding Student Poster and PICO (OSPP) Awards are students:

- who are first author & personally present the poster/PICO at the conference;
- who satisfy one of the following criteria:
 - current undergraduate (BSc) or postgraduate (MSc, PhD) student;
 - recent undergraduate or postgraduate student (conferral of degree after 1 January of the year preceding the conference)
- who are presenting their thesis work

Each first OSPP author can register only ONE abstract (poster or PICO) for the OSPP contest

**OSPP JUDGES – Don't forget to
evaluate the posters and report y
our scores (until late May)!!**

Nominations for Outstanding Young Scientists Award / Arne Richter Award for Outstanding Young Scientists

Nomination letter (1/2 page) including the division that the candidates research is most applicable to.

Curriculum Vitae. A summary of the candidate's CV (1 page) including their date of birth and the date when their highest degree qualification was received.

Selected bibliography. A list of selected publications by the candidate that best support the nomination (1/2 page). It should also state briefly the candidate's total number and types of publications and citations.

The whole nomination package for the Outstanding Young Scientists Award / Arne Richter Award for Outstanding Young Scientists must not exceed 2 pages, otherwise the nomination will not be accepted.

Arne Richter Award: From all division OYSA winners, four are selected for the EGU-wide Arne Richter Award, within four distinct groups [Solid Earth, Soft Earth, Planetary and Space Sciences, Interdisciplinary]

Deadline for Nomination Package
(submitted online to EGU)
June 15, 2018

Nominations for Beno Gutenberg Medal

Nomination letter (1 page). This must clearly detail why the candidate deserves this recognition, in particular focus on the candidate's scientific contributions to the field, their importance, their impact on the discipline and their implications for the future. The new views and new insights that have been stimulated by the candidate's work are particularly relevant.

Curriculum Vitae (2 pages). A summary of the candidate's CV, including the candidate's name, address, history of employment, degrees, research experience, honours, and service to the community.

Selected bibliography (2 pages). A list of selected publications by the candidate that best support the nomination. It should also state briefly the candidate's total number and types of publications and citations.

Supporting letters. Between 3 and 5 letters of support (maximum 1 page each) should be submitted. These letters should clearly establish the nominee's recognised contribution to the field.

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(submitted online to EGU)
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Beno Gutenberg Medal – Committee for 2019

The Committee for the Beno Gutenberg Medal 2019 is composed of the last five medalists who have been awarded the Beno Gutenberg Medal

2018



2017



2016



2015



2014



Think about the one outstanding seismologists who changed your scientific work and who deserve the Gutenberg Medal 2019 (or later)!

Gather your colleagues to compile a nomination package!



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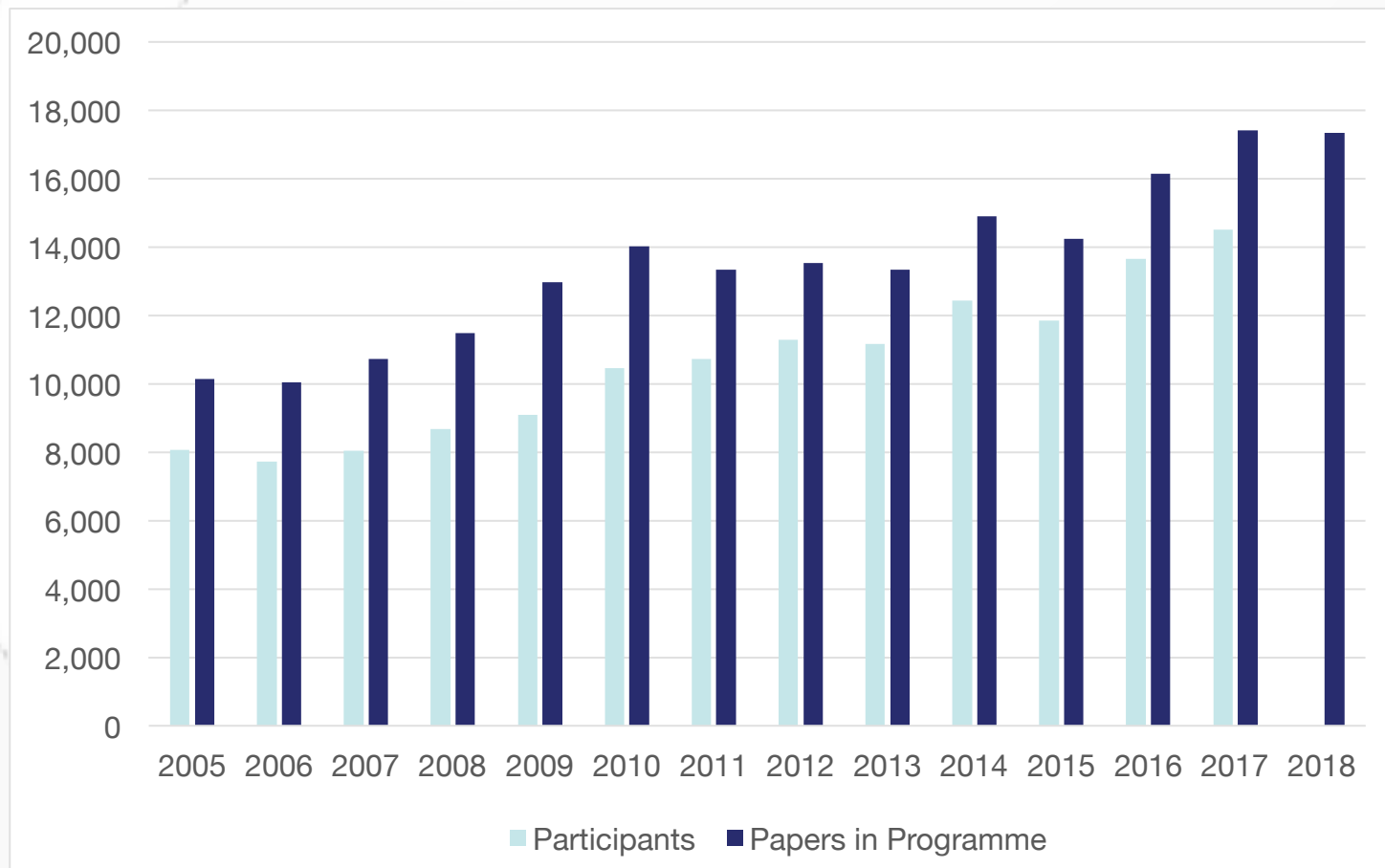
EGU General Assembly 2018 facts

As of 5 April (12:45), the Assembly 2018 provides:

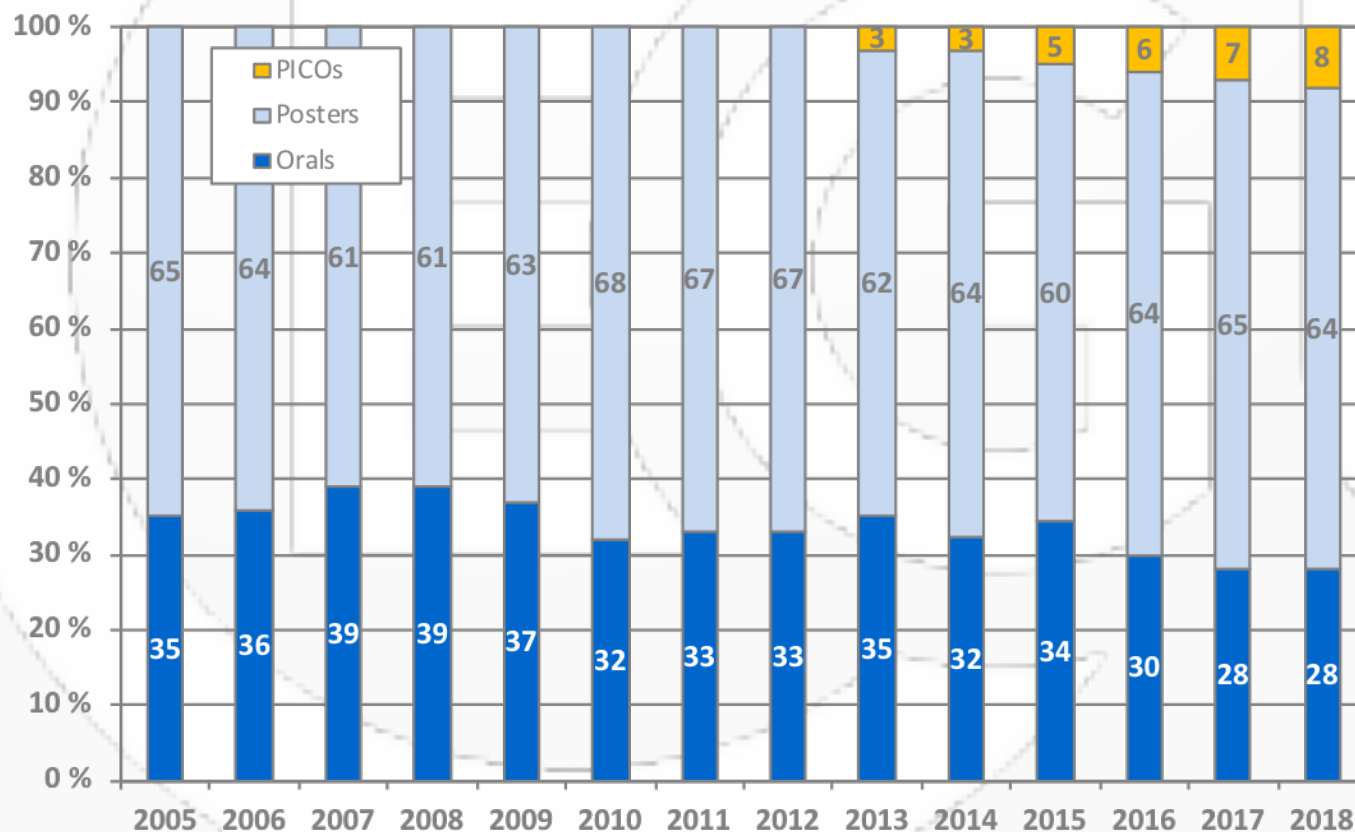
- 17,323 papers in programme | -0.44% (2017)
- 4,776 orals | 11,128 posters | 1,419 PICOs | ratio 28 / 64 / 8
- 12,733 registrations in advance | +12.37% (2017)
- 666 unique scientific sessions | 68 short courses | 294 side events*
- 433 out of 666 scientific sessions are co-organized (65%)
- The 433 co-organized include 20 IE sessions with 459 presentations
- Original sessions: 1,355; 1,028 still active, 327 withdrawn
- Withdrawn: 309 scientific sessions, 7 SC, and 11 side events

*Side events include the programme groups ML, PCN, FAM, TSM, SEV, PC, PPAA

Papers / Participants in programme 2005–2018



Presentation ratio 2005–2018



Programme Group		Lead sessions		Co-org. sessions			Total	
		#Abs.	%	#Ses.	#Abs.	#Ses.	#Abs.	#Ses.
SSE	Special scientific events	46	0	59	1	1	47	€
OEM	Outreach, education, and media	250	1%	20	95	5	345	↓
STM	Short courses and topical meetings	0	0	244	0	1	0	24
FAN	Feedback and networking	0	0	58	0	0	0	58
AM	Administrative meetings	0	0	38	0	0	0	38
IE	Interdisciplinary Events				256	12		
AS	Atmospheric Sciences	1,699	10%	52	1,412	57	3,111	109
BG	Biogeosciences	785	5%	29	1,088	48	1,873	77
CL	Climate: Past, Present, Future	1,324	8%	43	1,405	60	2,729	103
CR	Cryospheric Sciences	545	3%	23	586	28	1,131	51
EMRP	Earth Magnetism & Rock Physics	272	2%	10	849	35	1,121	45
ERE	Energy, Resources and the Environment	531	3%	19	360	15	891	34
ESSI	Earth & Space Science Informatics	162	1%	12	230	10	392	22
G	Geodesy	412	2%	15	104	6	516	21
GD	Geodynamics	378	2%	18	568	20	946	38
GI	Geosciences Instrumentation & Data Systems	332	2%	16	569	24	901	40
GM	Geomorphology	728	4%	30	824	38	1,552	68
GMPV	Geochemistry, Mineralogy, Petrology & Volcanology	621	4%	19	440	19	1,061	38
HS	Hydrological Sciences	2,286	13%	85	1,372	68	3,658	153
NH	Natural Hazards	1,113	6%	48	1,390	60	2,503	108
NP	Nonlinear Processes in Geosciences	367	2%	14	168	17	535	31
OS	Ocean Sciences	724	4%	20	898	31	1,622	51
PS	Planetary & Solar System Sciences	454	3%	18	109	7	563	25
SM	Seismology	561	3%	18	1,143	47	1,704	65
SSP	Stratigraphy, Sedimentology & Palaeontology	416	2%	16	333	16	749	32
SSS	Soil System Sciences	1,872	11%	79	1,245	62	3,117	141
ST	Solar-Terrestrial Sciences	467	3%	17	194	13	661	30
TS	Tectonics & Structural Geology	920	5%	32	595	26	1,515	58
PPAA	Pre- & post-assembly activities	0	0	4	0	0	0	4
Sum		17,265	100%	1,056				

Programme Group		Lead sessions		Co-org. sessions		Total		
		#Abs.	%	#Ses.	#Abs.	#Ses.	#Abs.	#Ses.
SM	Seismology	561	3%	18	1,143	47	1,704	65

Programme group statistics

Active scheduled	1,706
Status	Total scheduled: 1,750 Withdrawn thereof: 44
Granted supports	None: 1,704 (100%) ECSTS: 2 (0%)
Presentations	Orals: 502 (29%) Posters: 1,136 (67%) PICOs: 68 (4%)
Author identification specifics	ECS: 749 (44%)

Show statistics for all programme groups

Meeting statistics

Active scheduled	17,276
Status	Total scheduled: 18,051 Withdrawn thereof: 775
Granted supports	None: 17,008 (98%) ESTS: 25 (0%) ECSTS: 243 (1%)
Presentations	Orals: 4,833 (28%) PICOs: 1,225 (7%) Posters: 11,218 (65%)
Author identification specifics	ECS: 8,858 (51%)

Programme Group	Lead sessions			Co-org. sessions		Total	
	#Abs.	%	#Ses.	#Abs.	#Ses.	#Abs.	#Ses.
US	21	0	5	0	0	21	5
GDB	0	0	4	0	0	0	4
ML	13	0	46	0	0	13	46
SC	0	0	68	0	0	0	68
EOS	272	2%	13	73	2	345	15
PCN	0	0	11	0	0	0	11
FAM	0	0	86	0	0	0	86
TSM	0	0	135	0	0	0	135
SEV	3	0	3	0	0	3	3
PC	0	0	8	0	0	0	8
IE				458	20		
AS	1,867	11%	61	1,495	58	3,362	119
BG	941	5%	39	1,013	48	1,954	87
CL	1,296	8%	49	1,681	75	2,977	124
CR	467	3%	21	555	25	1,022	46
EMRP	287	2%	11	716	30	1,003	41
ERE	396	2%	18	233	13	629	31
ESSI	229	1%	14	189	12	418	26
G	445	2%	16	220	8	635	24
GD	481	3%	19	968	36	1,449	55
GI	448	3%	21	702	32	1,150	53
GM	873	5%	33	993	43	1,866	76
GMPV	698	4%	27	1,181	44	1,879	71
HS	2,356	14%	91	1,576	71	3,932	162
NH	1,276	7%	47	1,659	74	2,935	121
NP	500	3%	16	297	18	797	34
OS	578	3%	20	745	33	1,323	53
PS	360	2%	13	415	22	775	35
SM	412	2%	11	1,665	59	2,077	70
SSP	488	3%	20	760	31	1,248	51
SSS	1,090	6%	43	1,431	61	2,521	104
ST	528	3%	21	342	17	870	38
TS	943	5%	34	987	41	1,930	75
PPAA	0	0	4	0	0	0	4
Sum	17,238	100%	1,028				

SM	Seismology	412	2%	11	1,665	59	2,077	70
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Programme group statistics

Active scheduled	2,077
Granted supports	None: 2,069 (100%) ESTS: 1 (0%) ECSTS: 7 (0%)
Presentations	Orals: 577 (28%) Posters: 1,342 (65%) PICO: 158 (8%)
Author identification specifics	ECS: 968 (47%)

Meeting statistics

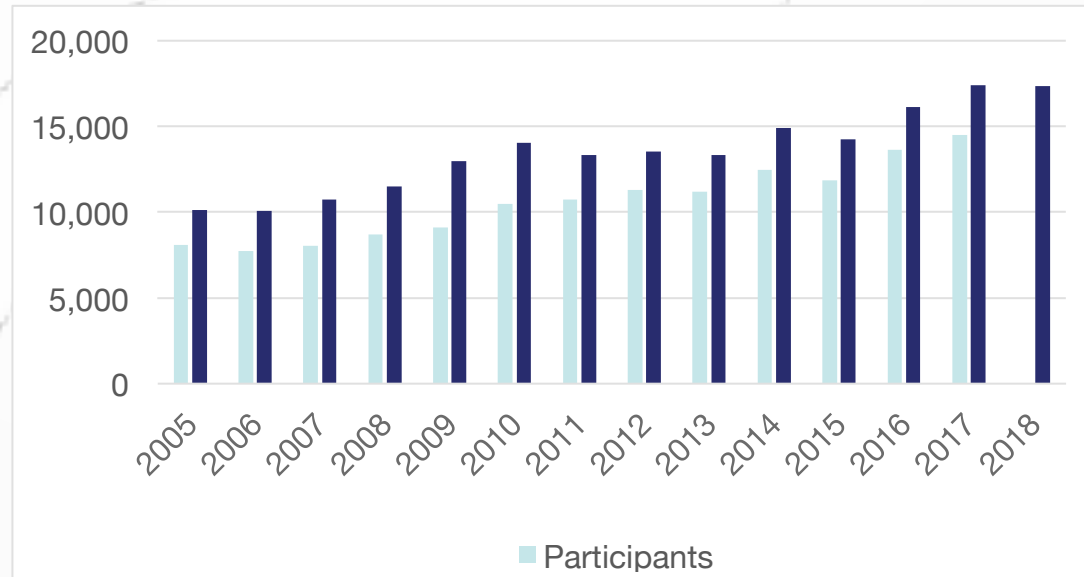
Active scheduled	17,238
Granted supports	None: 16,957 (98%) ESTS: 16 (0%) ECSTS: 265 (2%)
Presentations	Orals: 4,773 (28%) PICO: 1,412 (8%) Posters: 11,053 (64%)
Author identification specifics	ECS: 8,930 (52%)

- **Proposing & Planning Sessions for GA**
 - Try to connect early with colleagues
 - Try to think inclusive & cooperative; large integrative sessions are easier to schedule and “stronger” than many small fragmented sessions
 - Communicate with co-organizing divisions to agree where the Seismology Division should be the leading division
 - Seek input from division president and section officers

Planning ahead – The GA 2019 timeline

01 Jun – 21 Jun 18	Call-for-skeleton. Only sub-programme structure (headers), no sessions
25 Jun – 13 Sep 18	Public call-for-sessions
17 Sep – 12 Oct 18	Session programme finalization
15 Oct 18 – 10 Jan 19	Abstract submission

- No solicited presentations by conveners: “Authors (first and co-authors) should not have a solicited presentation in a session they (co-)convene. (Co-)conveners should not be presenting author, and are discouraged from being co-author, on oral presentations in a session they convene.”
- 1 abstract rule: “Authors are allowed as first author to submit either one regular abstract plus one abstract solicited by a convener, or two solicited abstracts.”
- Number of conveners on a session: At session submission minimum 2 – maximum 5
- Number of convenerships as a recommendation: 1 as main convener, maximum 3 (co-)convenerships total



- We may reach maximum poster capacity in ~2 years
- Oral sessions can reach 80% median room fill in ~2 years, meaning 50% of the rooms will be full to overfull
- There is no possibility for new rooms or extra space in the ACV
- EGU has signed a contract with the ACV until 2024
- 60% - 65% (2013-2018) of abstracts are posters, which are presented in 1.5 hours only

Current model

TB1	Orals, PICO
Break	
TB2	Orals, PICO
Lunch	
TB3	Orals, PICO
Break	
TB4	Orals, PICO
Break	
TB5	Posters, drinks
TB6	Medal lect, TM

- 4800 orals
- 1800 PICO
- 12500 posters (full day)
- Poster capacity full ~2020
- Room fill issues 2020/2021

Alternative model

TB1	Orals, PICO, Posters
Break	
TB2	Orals, PICO, Posters
Lunch	
TB3	Orals, PICO, Posters
Break	
TB4	Orals, PICO, Posters
TB5	Exhibition, drinks
TB6	Medal lectures, TM

- 6000-6400 orals
- 1800 PICO
- 12500 posters (full day).
- Poster capacity full by ~2023.
- Double poster capacity to 25000 by half-day showing time
- No room fill issues next 10 years

Agenda & Topics

- Welcome
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- Structure of the Seismology Division
- Any other business

Structure of our Division

President	Paul Martin Mai	sm@egu.eu
Deputy President	Philippe Jousset	pjousset@gfz-potsdam.de
Programme Group Chair	Paul Martin Mai	sm@egu.eu
Science Officers	Damiano Pesaresi	dpesaresi@inogs.it
	Seismic Instrumentation & Infrastructure	
	Heiner Igel	igel@geophysik.uni-muenchen.de
	Computational & Theoretical Seismology	
	Lapo Boschi	larryboschi@gmail.com
	Seismic Imaging Across Scales (from near-surface to global scale, incl. methodological developments)	
	Cédric Schmelzbach	cedric.schmelzbach@erdw.ethz.ch
	Seismic Imaging Across Scales (from near-surface to global scale, incl. methodological developments)	
	Susana Inês da Silva Custódio	susanacustodio@campus.ul.pt
	Deformation, Faulting and Earthquake Processes (incl. seismotectonics, geodynamics, earthquake source physics)	
	Paul Martin Mai	sm@egu.eu
	Deformation, Faulting and Earthquake Processes (incl. seismotectonics, geodynamics, earthquake source physics)	
	Philippe Jousset	pjousset@gfz-potsdam.de
	Crustal Fluids and Seismic Activity (incl. induced & triggered seismicity, volcano seismology)	
	Fabrice Cotton	fcotton@gfz-potsdam.de
	Engineering Seismology and Seismic Hazard	
	Aldo Zollo	aldo.zollo@unina.it
	Real-Time Seismology and Early Warning	



Susana Custodio

Henriette Sudhaus



Structure of our Division

- EGU is a bottom-up organization, and we – as a division – are rather flexible on how to organize ourselves
- Possible additions / changes?
 - Science Officers: *other fields to cover?*
 - Deputy President: *Philippe Jousset will take over as Division President at the GA 2019*

Early Career Representative teams (2016-2018)



Laura Parisi
Post-doc at
KAUST
EGU Point of
contact



Laura Ermert
PhD student
at ETH Zurich



Lucia Gualtieri
Post-doc at
Columbia
University



Kathrin Spieker
Researcher at
University of
Leipzig



Koen Van Noten
Post-doc at
Geological Survey
of Belgium



Matthew Agius
Post-doc at
University of
Southampton

EVENTS

- EGU proposal (meeting support request)
- Initial proposal: science + career building activities
- EGU Grant number S2017/400 (2500 Euros)
- Career-oriented activities
in the framework of the TIDES training school
organised by ECS-reps Lucia Gualtieri and Laura Parisi

**Activities for Early Career Scientists
organized by the ECS-Reps of the EGU Seismology Division
at the Third TIDES advanced training school
(Oxford, UK; 10-14 July 2017)**

- **Lecture on “How to write a successful proposal ”.** By Andreas Fichtner.
- **Panel discussion “Career paths in Academia and industry ”.**
Andrew Curtis (moderator), Yann Capdeville, Lucia Gualtieri, Valerie Maupin, Kathrin Sigloch, Martin Schimmel, Jeannot Trampert, Johan Robertson, James Rickett.
- **Poster evaluation and prize for the three best poster presentations.**
Awarded with 100£ offered by the International Seismological Centre.
- **Seismo-tree.**
Idea from Ana Ferreira, help from Andrea Berbellini.

New Early Career Representative team (2018-...)



Michaela Wenner
PhD student
at ETH Zürich &
WSL Birmensdorf
(CH)



Eric Löberich
PhD student
at the University
of Vienna (AT)



**Maria
Tsekhmistrenko**
PhD student at
the University of
Oxford (UK)



**Walid
Ben Mansour**
Now: Leicester
Soon: Postdoc at
Macquarie
Sydney (AUS)



Lucile Bruhat
Postdoc at
IPGP / ... (France,
Japan)



**Marina
Corradini**
PhD student
at IPGP
(France)



Nienke Blom
Postdoc at
the University
of Cambridge
(UK)
**EGU Point of
contact**

The next year(s)...

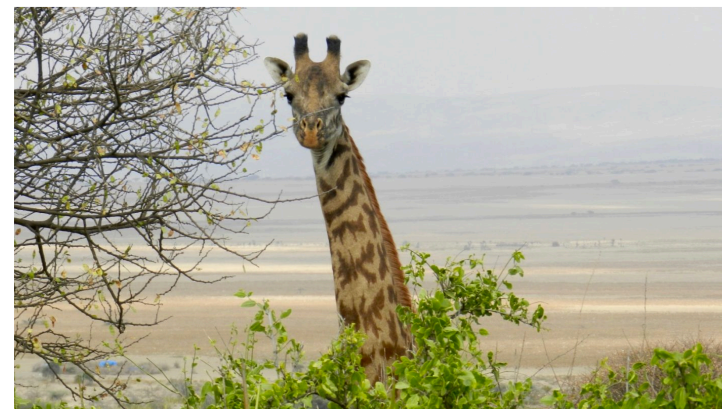
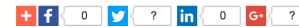
- EGU seismology blog:

<http://blogs.egu.eu/divisions/sm/>



The tough life of a seismologist in the field

Laura Parisi · August 5, 2016 · Uncategorized · No Comments



A giraffe of the Oldupai Gorge.

I have just been asked: "do you shun field work as most seismologists do?" My answer was "Definitely not!"

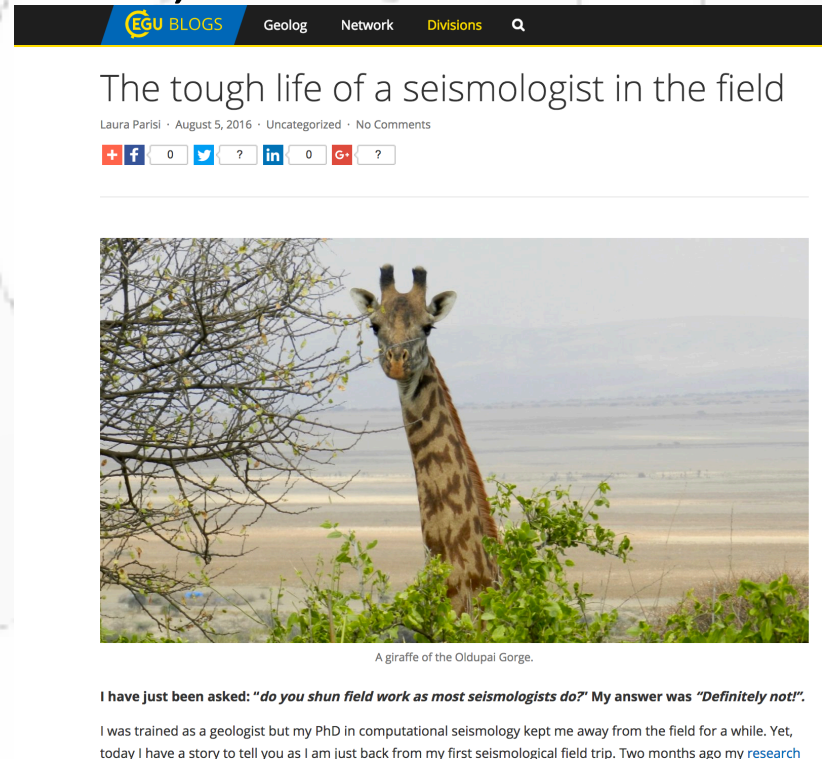
I was trained as a geologist but my PhD in computational seismology kept me away from the field for a while. Yet, today I have a story to tell you as I am just back from my first seismological field trip. Two months ago my [research](#)

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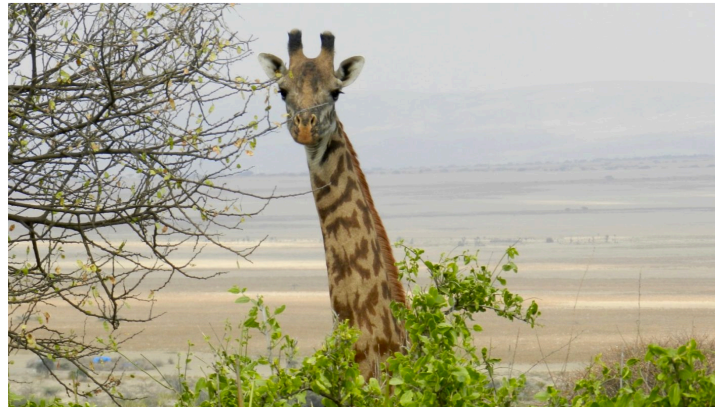


EGU BLOGS Geolog Network Divisions

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as well as social media: facebook, twitter...
- Towards more interaction with industry

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- Towards more interaction with industry
- EGU short course
Seismology for non-seismologists



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with (at least) the Geodynamics & Tectonics divisions

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- Towards more interaction with industry
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with (at least) the Geodynamics & Tectonics divisions
Seismology for non-seismologists
Geodynamics 101
...

Tonight...

SEISMOLOGY DIVISION SOCIAL EVENT
Bermuda Brau (Rabensteig 6)

Wednesday 11 April 2018.

Dinner at 8pm (1st floor).

Drinks together with GD and TS Divisions
afterwards (basement).

All seismological community
and friends
are welcome to join!

EGU General Assembly 2018

SM



Tonight...



Seismology dinner & drinks at Bermuda Bräu

- Dinner 20:00 **upstairs**
- Drinks later **downstairs** – with TS and GD divisions!
- Please bring **cash**

GET INVOLVED!

- Follow blog and twitter, like the facebook page
- Give us feedback on EGU, SM Division, General Assembly, ...
- Blog writing
- Ideas
- Next ECS representatives

Contact us ecs-sm@egu.eu

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GA Survey

www.egu2018.eu/feedback

- Distribution:
 - via email to participants after the GA
 - links on social media & blog
 - egu2018.eu website
 - Flyers/cards in Vienna
- Survey live during GA, until mid June



- Don't forget the deadlines for award nominations: June 15 !
- OSPP Judges: evaluate the posters & PICO's
- Planning for the GA19 begins soon!
- Engage with the ECS-reps; write for the Seismo-Blog !
- Enjoy the rest of the meeting !
- More info at <http://www.egu.eu/sm>

contact to discuss division matters

Martin Mai | sm@egu.eu

martin.mai@kaust.edu.sa

! the division lives from y/our initiatives !

EVENTS



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