

Nonlinear Processes in Geosciences (NP) division activities at the EGU General Assembly 2019

Due to the cancellation of the physical General Assembly 2020 in Vienna, the NP activities have been organized in a virtual format as for the other divisions.

Originally we received about 450 abstracts, 8 co-organized short courses, and three interdisciplinary-transdisciplinary sessions. Many sessions were also co-organized with other divisions (about 650 abstracts). Due to the cancellation of the physical assembly, the short courses are postponed and will be organized either at another period of the year or during the next General Assembly in Vienna. The ceremonies for the NP honours awarded to Valerio Lucarini with the Lewis Fry Richardson Medal 2020 and the Outstanding Early Career Scientist Award to Ekaterina Didenkulova, are also postponed to the General Assembly 2021 in Vienna.

Most of the sessions of the division have been organized in a chat format, with a considerable success with a large number of participants. Several sessions have been followed by more than 200 people, and some with about 500 participants. This success is of course largely due to the quality of the sessions proposed, but also due to the commitment of the conveners who have done an amazing work in preparing, organizing and managing the chat sessions. I would like to personally express my deep appreciation and gratitude to them for this huge work, that made of this experience a success.

During the NP division meeting, also organized in a chat format, several discussions have taken place and several decisions have been taken:

1. Format of the General Assembly

The chat format, put in place in a very short time period of time, has been discussed and several suggestions for improvement have been proposed (provided such format will be organized again), all transferred to the Programme Committee chair. The most important ones are:

- More time needed per display. Some sessions were full of presentations and others not, while the same time is allocated to all. Not easy to handle of course, maybe by having the contributions earlier
- A deadline for posting the material should be set, in such a way that the convener can prepare better the chat discussion
- Some suggestions to have at least Audio for discussions
- Prolong the visibility of the chat, and keep the discussion for a while

2. Governance Review

A governance review is currently taking place. It has been presented to the community and has been also briefly discussed. Several recommendations from the division have also been made. Among them:

- One important concern is the representation of small groups (diversity, inclusiveness...). This is indeed a crucial point to have the voice of small communities heard
- More involvement of the community in the decision process. In particular increase of the involvement of the community through the division meetings and also some consultations on important matters with votes from the whole community
- Transparent information for the whole community on the budget and the way money is spent

3. NP division at the General Assembly

For the general assembly of the EGU 2021, it has been decided to keep the structure of the main themes of the NP division as follows,

NP1 – Mathematics for Planet Earth
 NP2 – Dynamical Systems Approaches to Problems in Geosciences
 NP3 – Scales, Scaling and Nonlinear Variability
 NP4 – Time Series, Big data and Machine Learning
 NP5 – Predictability
 NP6 – Turbulence, Transport and Diffusion
 NP7 – Nonlinear waves
 NP8 – Emerging Phenomena in the Geosciences

The new NP executive board members are,

Science officers:

Valerio Lucarini (NP1, Mathematics of Planet Earth)
 Christian Franzke (NP2, Dynamical Systems Approaches to Problems in the Geosciences)
 François Schmitt (NP3, Scales, Scaling and Nonlinear Variability)
 Reik Donner (NP4, Time Series, Big Data and Machine Learning),
 Olivier Talagrand (NP5, Predictability),
 Yuliya Troitskaya (NP6, Turbulence, Transport and Diffusion),
 Julien Touboul (NP7, Nonlinear Waves),
 Henk Dijkstra (NP8, Emergent Phenomena in Geosciences),

Other members:

Daniel Schertzer (publications),
 Stéphane Vannitsem (Programme group chair),
 Davide Faranda (Scientific Affairs),
 Tommaso Alberti (Early Career Scientists),
 Shaun Lovejoy (Division Affairs)
 Auguste Gires (Webmaster).

The new Richardson medal committee is composed of:

Chair: Annick Pouquet,

Members: Ekaterina Didenkulova, Shaun Lovejoy, Valerio Lucarini, Edward Ott, Tim Palmer.

In these exceptional times, organizing meetings is challenging, but at the same time offers new opportunities to go for more virtual formats, reducing in that way the impact of travelling on Climate. This is a good trend, and in the future, the current experience should guide us to develop alternative meeting formats with a lower environmental impact.

Stéphane Vannitsem, NP division president