



INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS  
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

## The IUGG Electronic Journal

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This informal newsletter is intended to keep IUGG Member National Committees informed about the activities of the IUGG Associations, and actions of the IUGG Secretariat. Past issues are posted on the IUGG website (<http://www.iugg.org/publications/ejournals/>). Please forward this message to those who will benefit from the information. Your comments are welcome.

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### 1. IUGG Fellowship (Honorary Membership): Call for nominations

Fellowship (Honorary Membership) of the International Union of Geodesy and Geophysics is a tribute to individuals who have made exceptional contributions to international cooperation in geodesy or geophysics and attained eminence in the field of Earth and space sciences. The submission of nominations for IUGG Fellowship opens on **20 March 2018** and closes on **20 September 2018**. Honorary Members are bestowed an IUGG Fellow medal, lapel pin, and certificate, which will be presented at the Award Ceremony of the XXVII IUGG General Assembly in Montreal, Canada, on Saturday, 13 July 2019, following the announcement of the awards on 10 January 2019. The IUGG Fellow Selection Committee was appointed by the Union President, Michael Sideris. The Committee consists of the chair Joyce E. Penner (USA) and five members: Hugo Delgado Granados (Mexico), Monika Korte (Germany), Eugene Morozov (Russia), Kenji Satake (Japan), and Chris Rizos (Australia). Details on the IUGG Fellowship, including the procedure for nomination, eligibility criteria, and technical requirements, can be found at: <http://www.iugg.org/honors/Fellowship.pdf>. A list of IUGG Fellows (elected and conferred) is available at: [http://www.iugg.org/honors/fs\\_fellows.php](http://www.iugg.org/honors/fs_fellows.php).

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## **2. IUGG Early Career Scientist Award: Call for nominations**

The Early Career Scientist Award (ECSA) of the International Union of Geodesy and Geophysics honors early career scientists for their outstanding research in Earth and space sciences and international research cooperation. Submission of nominations for ECSA opens on **20 March 2018** and closes on **20 June 2018**. The awardees are bestowed an IUGG plaque and certificate, which will be presented at the Award Ceremony of the XXVII IUGG General Assembly in Montreal, Canada, on Saturday, 13 July 2019, following the announcement of the awards on 5 November 2018. IUGG covers travel expenses of the awardees to attend the General Assembly. The awardees will be invited to give a talk at the General Assembly. The IUGG ECSA Committee was appointed by the Union President. The Committee consists of the chair Jenny Baeseman (USA) and four members: Gregory Foltz (USA), Salvatore Grimaldi (Italy), Futoshi Takahashi (Japan), and Thorsten Wagener (UK). Details on the ECSA, including the procedure for nomination, eligibility criteria, and technical requirements, can be found at: <http://www.iugg.org/honors/ECSAward.pdf>. A list of recipients of the IUGG ECSA is available at: [http://www.iugg.org/honors/ecs\\_ awardees.php](http://www.iugg.org/honors/ecs_ awardees.php).

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## **3. New deadline for submission of IUGG grant applications**

Due to several requests for an extension to the deadline for submission of grant applications, it is extended by two weeks until **15 March 2018**. Please be reminded that typical proposals should be related to at least one of the IUGG priority areas and be relevant to the 100th anniversary of IUGG. The proposal may be for an interdisciplinary conference / workshop / symposium addressing the importance of international cooperation in the geosciences, and the enhancement of geoscientific research and Earth science education in Member countries as well as in less developed countries. Although the range of activities supported is broad, the project proposals should be of both scientific and societal importance, and their results are expected to provide clear recommendations to politicians and other decision-makers at national and regional levels, and to the general public in terms of urgent actions to be undertaken. The deliverables of the projects should bring increased visibility to IUGG and the Union Associations. Proposals should be international in scope and involve women scientists, younger researchers, and scientists from developing countries, and be submitted by IUGG Associations and/or Union Commissions involving National Committees for IUGG. Preference will be given to proposals that are interdisciplinary, especially those involving more than two of the IUGG Associations and Union Commissions as well as regions of Africa, Asia/Oceania, Latin America, and the Middle East. The application form can be obtained from the IUGG Secretariat by request from Secretaries-General of IUGG Associations, Union Commissions or National Committees. More information on the call for proposals can be found at: [http://www.iugg.org/programs/2018-2019\\_IUGG\\_GP\\_Guidelines.pdf](http://www.iugg.org/programs/2018-2019_IUGG_GP_Guidelines.pdf).

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## **4. Report on the 2017 Past Antarctic Ice Sheet Dynamics (PAIS) Conference**

The PAIS Conference was held in Trieste, Italy, from 10 to 15 September 2017. It was organized by the Past Antarctic Ice Sheet Dynamics (PAIS) Programme of the ICSU Scientific Committee on Antarctic Research (SCAR; <https://www.scar.org/science/pais/pais/>), with financial support from several organizations including IUGG. There were 210 scientists and students from 18 countries attending the conference. More than half the participants were early career researchers and graduate students. There were 62 oral presentations in a single plenary session, which ensured cross-disciplinary participation and each day finished with a facilitated open plenary discussion, and 130 posters were up all week. The conference discussed the latest advances in the current state of Antarctic

ice sheet and sea-level change, and identified the research gaps and future priorities for the next phase of the SCAR research programmes. Specific emphasis was placed on the research priorities of the Intergovernmental Panel on Climate Change (IPCC), Antarctic Treaty System (ATS), and the recent SCAR Horizon Scan. Keynote speakers highlighted new multidisciplinary research directions related to the impact of Antarctic ice sheet and climate change on biological systems, on the global climate system and on sea-level change.



*A group photo of the conference participants (photo: L. De Santis)*

Steven Chown, SCAR President, discussed his vision for SCAR research to have more impact, both within the ATS and UN frameworks. Valerie Masson-Delmotte, Co-Chair of IPCC Working Group I, discussed how the SCAR community could contribute to the next assessment report. Chuck Kennicutt, leader of the SCAR Horizon Scan and the Council of Managers of National Antarctic Programs (COMNAP) road map processes, talked about how international logistics and operations could be aligned to address the big science questions. Several workshops were held during the Conference, and one of them was organized by the Association of Polar Early Career Scientists (APECS) on the use of social media to effectively communicate science to the wider public (<http://www.apecsitaly.it/social-media-and-science-communication>). Outreach side events, open to the public and media, with film shows, seminars, and educational activities for the secondary schools and high schools, were organized in collaboration with Museo dell' Antartide, the Italian branch of the International Ocean Discovery Program (IODP), APECS, Sissa media-lab, and scuola Roli Trieste. A film about PAIS expeditions (<http://www.scar-pais.org/index.php/conference/short-film>) was shown at the Conference, emphasizing the importance of collaborative efforts to address ambitious challenges. Rebecca Parker (University of Otago, Dunedin, New Zealand) and Rachel Bertram (Imperial College London, UK) were awarded the best student poster prizes. Editors of Nature Communications, Nature Geoscience, and Reviews of Geophysics attended the meeting. The outcome of the Conference will be a white paper that identifies the new strategic directions, as the basis for a future interdisciplinary SCAR research programme. More information on the conference can be found at: <http://www.scar-pais.org/index.php/conference>.

Laura De Santis, Chair of the Local Organizing Committee

## **5. Report on the International Space Science School on “Complexity and Turbulence in Space Plasmas”**

The School on “Complexity and Turbulence in Space Plasmas” was held from 18 to 23 September 2017 in the International School of Space Science (ISSS) at the Gran Sasso Science Institute in L’Aquila, Italy. The School was oriented towards providing an extensive introduction to complexity and turbulence in space and astrophysical plasmas, covering different topics from kinetic processes, magnetohydrodynamics (MHD) and kinetic turbulence, and complexity on both theoretical and observational sides in view of current studies and space missions. The board of lecturers was composed of experts from research institutes and universities of several countries (Belgium, France, Italy, Sweden, and US). The School was attended by more than 30 active students, post-docs, and young researchers from Argentina, Chile, China, Columbia, Czech Republic, India, Italy, Norway, Romania, Russia, and UK. Students could also present their work during the School. This allowed extensive discussion between participants and lecturers on the School’s topics. The School was co-sponsored by IUGG. More information on the School can be found at: <http://www.cifs-iss.org/flyer/2017-september.pdf>.

Umberto Villante, ISSS Director

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## **6. Report on the 8<sup>th</sup> Nordic Paleomagnetism Workshop “Paleogeography, Paleoclimate and the Geomagnetic Field”**

The 8th Nordic Paleomagnetism Workshop (NPW) was held in Leirubakki, Iceland, from 30 September to 7 October 2017, and co-sponsored by IUGG. It was the largest meeting to date bringing together 37 scientists from 14 countries with a variety of Earth Sciences backgrounds to work on the paleogeography, paleoclimate and paleomagnetism of the Phanerozoic and Precambrian, the Mesozoic geodynamo, and the Earth’s magnetic field over the past 100,000 years. NPWs were initiated in 1986 with the aim of uniting Nordic scientists working in paleomagnetism to rigorously catalogue, evaluate and distribute a growing amount of paleomagnetic data, with the goal of tackling problems at the forefront of paleomagnetic research. Over the years the workshops have expanded to involve a number of international scientists, melding Nordic interests with those of the global community. The workshop also brought together young scientists and established leaders in the field, to work together in small groups to address well-defined scientific problems and produce tangible results. Presentations spanned topics such as updates to global paleomagnetic and geological databases, plate tectonic reconstructions, geomagnetic field modelling, and the relevance of numerical dynamo simulations to understanding the long-term evolution of Earth’s magnetic field. More information: <https://nordicworkshop2017.wordpress.com/logistics>.

Maxwell Brown, Chair of the Local Organizing Committee

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## **7. Report on the CODATA 2017 Conference 'Global Challenges and Data-Driven Science'**

The CODATA 2017 Conference 'Global Challenges and Data-Driven Science' was held in Saint Petersburg, Russia, from 8 to 13 October 2017. This event brought together more than 150 research scientists and recognized experts in the field of data from 35 countries of the world, including France, Germany, Switzerland, Great Britain, USA, Canada, China, Russia, Japan, India, South Africa, Nigeria and others. The wide geographical coverage represented by the participants testifies to the scientific significance and high level of the conference. The conference covered a wide range of issues



related to data science, including the collection and processing of large amounts of data, the use of methods of system analysis, machine learning and algorithms for artificial intelligence. Over 160 presentations at 25 scientific sessions, several business meetings and workshops took place during the conference.



IUGG co-sponsored the Conference and the IUGG Union Commission on Data and Information (UCDI) organized a session at the Conference entitled: “Modern Strategies for Data Collection and Analysis for the Better Understanding of the Earth System” (lead convener: A. Soloviev, Vice Chair of the UCDI). The IUGG Secretary-General Alik Ismail-Zadeh and Bureau Member Isabelle Ansorge participated in the Conference.

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## 8. IUGG Conference on Mathematical Geophysics (CMG2018)



The 32nd IUGG Conference on Mathematical Geophysics (CMG2018), organized by the IUGG Union Commission on Mathematical Geophysics (IUGG-CMG), will be held during 23-28 June 2018 in Nizhny Novgorod, Russia. The biennial CMG meeting covers a wide range of current research topics in mathematical geophysics. The conference aims to discuss key theoretical and observational aspects of solid earth, ocean, atmosphere, cryosphere, climate and other contemporary topics. The conference will take place on a boat that cruises the Volga River with daily stops at historic sites. The boat will depart and return to the city of Nizhny Novgorod. The registration and abstract submission deadline is **15 March**. For more information please visit the CMG2018 web site: <http://cmg2018.iapras.ru/> or contact Anna Kazarova [kazarova@ipfran.ru] for questions or assistance with visa.

The CMG2018 Organizing Committee, and the IUGG-CMG

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## 9. Congress of the Turkish National Union of Geodesy and Geophysics

As a member of the International Union of Geodesy and Geophysics (IUGG) for more than half a century, the Turkish National Union of Geodesy and Geophysics (TNUGG) is organizing its first Scientific Congress between 30 May and 2 June 2018 in Izmir, Turkey, to bring together geoscientists from all over the world to present their work and discuss their ideas with experts in all fields of geoscience. We look forward to welcoming you to Izmir. The abstract submission deadline is **16 March 2018**. More information on the Congress can be found at the meeting's website: <http://www.tuijbkongre2018.org/en>

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## 10. Meeting calendar

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG website (<http://www.iugg.org/calendar.php>). Individual Associations also list more meetings on their websites according to their disciplines.

### **March**

- 4-9, AGU, Cascais, Portugal, Chapman Conference on Particle Dynamics in the Earth's Radiation Belts. Web: <http://chapman.agu.org/particle-dynamics/>
- 18-21, ICA, IGU, ISPRS, IUGG, URSI, Istanbul, Turkey, Gi4DM 2018 GeoInformation for Disaster Management. Web: <http://www.gi4dm2018.org/>
- 18-23, AGU, Puerto de la Cruz, Tenerife, Canary Islands, Spain, Chapman Conference on Stratospheric aerosol in the post-Pinatubo era: Processes, Interactions, and Importance. Web: <http://chapman.agu.org/stratospheric-aerosol/>
- 22-23, IAPSO, IUGG, Jakarta, Indonesia, 2nd IndoOS Review Workshop. Web: <http://www.clivar.org/news/soliciting-inputs-indian-ocean-observing-system-indoos-review>

### **April**

- 3-6, IAMAS, WCRP, Boulder, CO, USA, Aerosols, Clouds, Precipitation and Climate (ACPS) workshop. Web: <http://acpcinitiative.org/Meetings.html>
- 8-13, EGU, Vienna, Austria, European Geosciences Union General Assembly 2018. Web: <http://www.egu2018.eu>
- 16-20, IAGA, IUGG, COSPAR, SCOSTEP, Buenos Aires, Argentina, COLAGE XI - Eleventh Latin American Conference on Space Geophysics. Web: <http://www.iafe.uba.ar/colage11>
- 23-26, IAG, Chania, Greece, International Review Workshop on Satellite Altimetry Cal/Val Activities and Applications. Web: <http://www.frm4alt.eu/int-cal-val-review>
- 23-27, IASPEI, IUGG, Al Hoceima, Morocco, Second General Assembly of the African Seismological Commission (AfSC 2018). Web: <https://afsc2018.sciencesconf.org/>
- 24-26, IAMAS, IUGG, SCAR, São José dos Campos-SP, Brazil, 4th International ANGIN workshop: Exploration of High-latitude Upper Atmosphere Wave Dynamics. Web: <http://www.inpe.br/angwin>

### **May**

- 2-4, GEO, Frascati, Italy, 3rd GEO Data Providers Workshop. Web: [http://www.earthobservations.org/me\\_201805\\_dpw.php](http://www.earthobservations.org/me_201805_dpw.php)
- 6-9, IAHS, Algiers, Algeria, International Conference on African Large River Basin Hydrology. Web: <http://friend2018.ensh.dz/Accueil.html>

- 6-11, IAG, Istanbul, Turkey, UN GGIM AP/IAG/FIG Technical Seminar on Reference Frames in Practice. Web: <https://www.fig.net/fig2018/rfip.htm>
- 6-11, IAMAS, IUGG, WCRP, Canmore, AB, Canada, 2018 GEWEX Science Conference "Extremes and Water on the Edge". Web: <https://www.gewexevents.org/events/2018conference/>
- 8-10, IAHS, Cordoba, Spain, RSHS'18, Remote Sensing & Hydrology Symposium. Web: <http://iahs.info/uploads/Meetings/RSHS18.pdf>
- 12-14, IASPEI, IUGG, Chengdu, China, 12th General Assembly of the Asian Seismological Commission (ASC) together with the 4th International Conference on Continental Earthquakes (ICCE). Web: <http://www.4thicce.com/>
- 12-14, IAPSO, IUGG, Baku, Azerbaijan, Understanding the Problems of Inland Waters: Case Study for the Caspian Basin (UPCB). Web: <http://upcm2018.org/>
- 14-17, IASPEI, IUGG, Miami, FL, USA, 3rd General Assembly of the Latin American and Caribbean Seismological Commission (LACSC) and Seismological Society of America (SSA) joint meeting. Web: <http://seismology2018.org/>
- 14-19, IAGA, IAMAS, IUGG, SCOSTEP, Hefei, China, Long-Term Changes and Trends in the Atmosphere workshop (ICMA). Web: <http://trends2018.ustc.edu.cn/home.html>
- 21-25, IAMAS, IAPSO, SCAR, Nanjing, China, Summer School on the Polar Climate System. Web: <http://202.119.112.75/s/2159/t/2672/a/172397/info.jspy>
- 21-25, IAVCEI, Olot, Spain, 7th International Maar Conference. Web: <https://maar2018.com>
- 28 May - 1 June, URSI, Gran Canaria, Spain, AT-RASC 2018. Second URSI Atlantic Radio Science Meeting. Web: <http://www.at-rasc.com/>
- 30 May - 1 June, IAG, Amsterdam, Netherlands, EUREF Symposium 2018, Web: <https://euref2018.eventtouch.eu/>
- 30 May - 2 June, NC Turkey, Izmir, Turkey, TUJJBK 2018. Scientific Congress of the Turkish National Union of Geodesy and Geophysics. Web: <http://www.tujjbkongre2018.org/en/>

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