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The *IAG Newsletter* is under the editorial responsibility of the *Communication and Outreach Branch* (COB) of the IAG.

It is an open forum and contributors are welcome to send material (preferably in electronic form) to the IAG COB ([newsletter@iag-aig.org](mailto:newsletter@iag-aig.org)). These contributions should complement information sent by IAG officials or by IAG symposia organizers (reports and announcements). The *IAG Newsletter* is published monthly. It is available in different formats from the IAG new internet site: <http://www.iag-aig.org>

Each *IAG Newsletter* includes several of the following topics:

- I. news from the Bureau Members
- II. general information
- III. reports of IAG symposia
- IV. reports by commissions, special commissions or study groups
- V. symposia announcements
- VI. book reviews
- VII. fast bibliography

## Meeting Announcements

*GGHS2016 - Abstract Submission extended to May 31, 2016*  
*19-23 September 2016, Thessaloniki, Greece*

Dear Colleagues,

The abstract submission deadline for the First Joint Commission 2 and IGFS Meeting “International Symposium on Gravity, Geoid and Height Systems 2016” to be held in Thessaloniki, Greece on September 19-23, 2016 is extended to **May 31<sup>st</sup>**. We would appreciate your contributions of abstracts at latest by May 31<sup>st</sup>.

For further information and submission details please visit <http://gghs2016.com/calls/abstract-guidelines/>

We are looking forward to welcoming you in Thessaloniki!

GEORGE S. VERGOS

(on behalf of the GGHS2016 LOC and Scientific Committee)

### *Meetings Calendar*

#### *FIG Commission 5 Technical Seminar on Reference Frames in Practice*

*May 1 - 2, 2016, Christchurch, New Zealand*

URL: <http://www.fig.net/fig2016/commission5.htm>

#### *FIG Working Week 2016*

*May 2 – 6, 2016, Christchurch, New Zealand*

URL: <http://www.fig.net/fig2016/>

#### *ESA Living Planet Symposium 2016 and 6<sup>th</sup> GOCE User Workshop*

*May 9 – 13, 2016, Prague, Czech Republic*

URL: <http://lps16.esa.int/>

#### *Airborne Gravimetry for Geodesy Summer School*

*May 23 – 27, 2016, Silver Spring, Maryland, USA*

URL: <http://geodesy.noaa.gov/>

#### *EUREF Symposium 2016*

*May 25 - 27, 2016, San Sebastian, Spain*

URL: [http://www.euref.eu/euref\\_symposia.html](http://www.euref.eu/euref_symposia.html)

#### *European Navigation Conference 2016*

*May 30 – June 2, 2016, Helsinki, Finland*

URL: <http://www.enc2016.eu>

#### *Baltic Geodetic Congress*

*June 2 – 4, 2016, Gdansk, Poland*

URL: <http://www.bgc.geomatyka.eu/2016/>

#### *18th Geodynamics and Earth Tide Symposium 2016*

*June 5 – 9, 2016, Trieste, Italy*

URL: <http://www.lithoflex.org/g-et/>

### ISG Geoid School

June 6 – 10, 2016, Ulaanbaatar, Mongolia

URL: <http://www.isgeoid.polimi.it/>

### 6th International Conference on Cartography & GIS

June 13-17 2016, Albena, Bulgaria

URL: <http://www.iccgis2016.cartography-gis.com/>

### ISDE 2016

July 7-8 2016, Beijing, China

URL: [www.isde2016summit.org](http://www.isde2016summit.org)

### International Conference "Data Intensive System Analysis for Geohazard Studies"

July 18 – 21, 2016, Sochi region, Mountain cluster, Russia

URL: <http://sochi2016.gcras.ru/>

### GAGER 2016

July 18 – 23, 2016, Wuhan, Hubei, China

Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016) – A Joint IAU / IAG / IERS Symposium

URL: <http://main.sgg.whu.edu.cn/gager2016/>

### ESA-JRC Summer School on GNSS 2016

July 18 – 29, 2016, Ispra, Italy

URL: [www.esa-jrc-summer-school.org](http://www.esa-jrc-summer-school.org)

### International Symposium on Geodesy and Geodynamics (ISGG2016)

July 22 – 25, 2016, Tianjin, China

URL: <http://isgg2016.csp.escience.cn>

### ICG+2016

July 27 – 30, 2016, Shanghai, China

IAG/CPGPS International Conference on GNSS+

URL: <http://202.127.29.4/meetings/icg2016>

### 41st COSPAR Scientific Assembly

July 30 – August 7, 2016, Istanbul, Turkey

URL: <http://www.cospar-assembly.org/>

### AOGS 13<sup>th</sup> Annual Meeting

July 31 – August 5, 2016, Beijing, China

URL: <http://www.asiaoceania.org/aogs2016/>

### IAG Commission 4 „Positioning and Applications“ Symposium

September 4-7, 2016, Wroclaw, Poland

URL: <http://www.igig.up.wroc.pl/IAG2016/>

### 18th General Assembly of WEGENER

September 12-15, 2016, Azores, Portugal

WEGENER 2016: Understanding earth deformation at plate boundaries

URL: <http://wegener.segal.ubi.pt>

### ION GNSS+ 2016

September 12-16, 2016, Portland, USA

URL: <http://www.ion.org/gnss/index.cfm>

16<sup>th</sup> International Mine Surveying Congress

September 12-16, 2016, Brisbane, Australia

URL: <http://www.ism2016.com/>

GGHS2016

September 19-23, 2016, Thessaloniki, Greece

URL: <http://www.gghs2016.com>

13<sup>th</sup> European VLBI Network (EVN) Symposium

September 20-23, 2016, St. Petersburg, Russia

URL: <http://www.ipa.nw.ru/EVN2016/>

4<sup>th</sup> International School on "The KTH Approach to Modelling the Geoid"

September 25-29, 2016, Johor Bahru, Malaysia

URL: <https://www.kth.se/en/abe/inst/som/avdelningar/geo/geodesi/handelser-1.78120>

First International Workshop on VLBI Observations of Near-field Targets

October 5 – 6, 2016, Bonn, Germany

URL: <http://ivscc.gsfc.nasa.gov/meetings/index.html>

INTERGEO, Geodätische Woche

October 11 – 13, 2016, Hamburg, Germany

URL: <http://www.intergeo.de/>

GGOS Days

October 24 – 28, 2016, Cambridge, MA, USA

URL: <http://www.iers.org/IERS/EN/NewsMeetings/ForthcomingMeetings/forthcoming.html>

IDS Workshop

October 31 – November 1, 2016, La Rochelle, France

URL: <http://ids-doris.org/meetings/ids-meetings.html>

SAR Altimetry Workshop

October 31 2016, La Rochelle, France

URL: <http://www.aviso.altimetry.fr/en/news/events-calendar.html>

OSTST 2016

November 1 – 4, 2016, La Rochelle, France

URL: <http://ids-doris.org/meetings/ids-meetings.html>

IGNSS 2016

December 6 - 8, 2016, Sydney, Australia

International Global Navigation Satellite Systems 2016 Conference

URL: <http://www.ignss2016.unsw.edu.au>

AGU 2016 Fall Meeting

December 12 – 16, 2016, San Francisco, California, USA

URL: <http://meetings.agu.org/upcoming-meetings/>

EGU General Assembly 2017

April 23-28, 2017, Vienna, Austria

URL: <http://www.egu2017.eu/>

23rd Working Meeting of the European VLBI Group for Geodesy and Astrometry (EVGA)

May 15-19, 2017, Gothenburg, Sweden

URL: <http://iag.dgfi.tum.de/index.php?id=291>

FIG Working Week 2017

May 29 – June 2, 2016, Helsinki, Finland

URL: <http://www.fig.net/fig2017/>

IAG and IASPEI Joint Scientific Assembly

July 30 – August 4, 2017, Kobe, Japan

URL: <http://iag.dgfi.tum.de/index.php?id=291>

AOGS 14<sup>th</sup> Annual Meeting

August 6-11, 2017, Singapore, Singapore

URL: [http://www.asiaoceania.org/society/public.asp?view=up\\_coming](http://www.asiaoceania.org/society/public.asp?view=up_coming)

AGU 2017 Fall Meeting

December 11-15, 2017, New Orleans, LA, USA

URL: <https://meetings.agu.org/>

EGU General Assembly 2018

April 8-13, 2018, Vienna, Austria

URL: <http://www.egu2018.eu/>

AOGS 15<sup>th</sup> Annual Meeting

June 3-8, 2018, Hawaii, USA

URL: [http://www.asiaoceania.org/society/public.asp?view=up\\_coming](http://www.asiaoceania.org/society/public.asp?view=up_coming)

10<sup>th</sup> IVS General Meeting

June 3-8, 2018, Longyearbyen, Spitsbergen, Norway

URL: <http://www.iers.org/IERS/EN/NewsMeetings/ForthcomingMeetings/forthcoming.html>

IAU XXXth General Assembly

August 20-31, 2018, Vienna, Austria

URL: <http://astronomy2018.univie.ac.at/>

21<sup>st</sup> International Workshop on Laser Ranging

October 27-31, 2018, Canberra, Australia

URL: <http://www.iers.org/IERS/EN/NewsMeetings/ForthcomingMeetings/forthcoming.html>

AGU 2018 Fall Meeting

December 10-14, 2018, Washington, D.C., USA

URL: <https://meetings.agu.org/>

EGU General Assembly 2019

April 7-12, 2019, Vienna, Austria

URL: <http://www.egu2019.eu/>

27<sup>th</sup> IUGG General Assembly

July 8 – 17, 2019, Montreal, Canada

URL: <http://www.iugg.org/assemblies/>

AOGS 16<sup>th</sup> Annual Meeting

July 28 – August 2, 2019, Singapore, Singapore

URL: [http://www.asiaoceania.org/society/public.asp?view=up\\_coming](http://www.asiaoceania.org/society/public.asp?view=up_coming)

## Reports

### *3<sup>rd</sup> JISDM 2016*

The 3rd Joint International Symposium on Deformation Monitoring (JISDM) was held at TU Wien (Vienna University of Technology), Austria, from 30th March to 1st April 2016 organized by the Research Group Engineering Geodesy of the Department of Geodesy and Geoinformation. It follows the more than 40 years old tradition of the FIG Symposium series on Deformation Measurements and of the IAG Symposium series on Geodesy for Geotechnical and Structural Engineering expressing the tight collaboration between these two geodetic organizations. The symposium is the most important geodetic meeting worldwide dealing with the topics on geodetic monitoring and deformation analysis. During the three-day-long meeting the entire spectrum of deformation studies was covered. One aim of the symposium was to reflect contributions from different fields of geodesy and geomatics, like engineering geodesy, spatial geodesy, photogrammetry and remote sensing. Around 150 participants from 25 countries attended the successful conference.



The program of the oral presentations was structured in two parallel tracks including 82 oral and nine poster presentations. The topics related to core methodological, technical and practical achievements in the field of deformation monitoring. Highlights of the conference programme included the discussion of scientific progress related to the monitoring of different natural and anthropogenic measuring objects, such as ground subsidence, landslides, glacier movements, bridges, tunnels or wind turbines. The latest methodological developments at theoretical level, modern sensors and measurement technologies as well as applications on man-made structures and natural objects were contents of the conference program. Areal monitoring techniques, GNSS and fibre-optics for deformation measurements, quality analysis of geodetic networks and time series, modern approaches to structural and geo-monitoring were only some examples. The program also included two sessions dealing with “Novel Approaches for Absolute Distance Measurements”. The respective talks were given by members of the EURAMET project “Metrology for long distance surveying”. In the opening two keynote speeches were given dealing with the role of deformation monitoring in the current global practice of structural health monitoring and lifecycle management of assets presented by Helmut Wenzel from Vienna Consulting Engineers and the use of the Leica GeoMoS monitoring software package presented by Michael Rutschmann from Leica Geosystems. Furthermore, Wolfgang Niemeier from TU Braunschweig gave a laudation for Heribert Kahmen from TU Wien showing his lifetime achievements in the field of engineering geodesy.

For the first time, the authors had the opportunity to apply for a peer-review process. 23 papers successfully passed the review process. Ten of these reviewed papers have been selected for a special issue of the Journal of Applied Geodesy, which was published as issue No. 1 of Volume 10. In addition, authors were given the possibility to submit revised versions of their papers for a second special issue of the Journal of Applied Geodesy as well as for the Journal of Applied Geomatics. Also, in recognition of early-career scientists’ efforts to keep on excelling, the organizing committee awarded a paper prize to the best student presentation.

Due to the great success of the conference it was decided to hold the 4th JISDM in two years. The organizers will announce soon the location and time for the next edition.

HANS NEUNER  
GÜNTHER RETSCHER  
VASSILIS GIKAS

#### *4th IAG Symposium “Terrestrial Gravimetry. Static and Mobile Measurements”*

The 4th IAG Symposium “Terrestrial Gravimetry – Static and Mobile Measurements” (TG-SMM-2016) took place in St Petersburg, Russian Federation, 12 to 15 April 2016, at the CSRI “Elektropribor”. It was organised by IAG Commission 2 “Gravity Field” and the State Research Center of the Russian Federation Concern CSRI “Elektropribor”, and co-sponsored by the Russian Foundation for Basic Research and the Committee for Science and Higher Education of the St Petersburg government.

The four streams of the symposium reflect the topics of interest of Sub-Commission 2.1 “Gravimetry and Gravity Networks”:

- Terrestrial, shipboard and airborne gravimetry
- Absolute gravimetry
- Relative gravimetry, gravity networks and applications of gravimetry
- Cold atom and superconducting gravimetry, gravitational experiments

The overarching theme of the symposium was “Advancing Gravimetry for Geophysics and Geodesy”. The International Scientific Committee was chaired by Vladimir G. Peshekhonov (Russia) and Urs Marti (Switzerland), and also included members from 12 countries. Working languages of the symposium - English and Russian - were supported through a translation service. The proceedings of the symposium were published prior to the symposium and included 43 papers.

There were 58 presentations (1 introductory presentation, 39 plenary talks and 18 poster papers) in the program. Five additional presentations were made on-line by researchers from Brazil, Switzerland, Ukraine and USA. 123 participants from 18 countries – Argentina, Austria, Brazil, China, Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, Kazakhstan, Norway, Russia, Sweden, Switzerland, Ukraine, and USA, attended the symposium. Welcome speeches were made by Vladimir Peshekhonov and Urs Marti. The introductory talk “Airborne Gravity Field Measurements – Status and Developments” was given by A.V. Olesen.

It should be noted that together with the presentations on the continued development of absolute and relative gravimeters based on “familiar” physical principles and mechanisms (such as springs, macroscopic test objects, etc.), the application of quantum principles and atomic test objects (the clouds of cold atoms) in the design of new gravity measuring instruments was emphasised in a number of talks. New techniques for gravity field measurements on moving platforms (such as aircrafts and ships), including those based on cold atom gravimeters, were also described in several talks.

The cultural program included a night boat trip on the Neva River, a guided night bus tour of St Petersburg, and individual tours of the museums of St Petersburg (the Hermitage, Russian Museum, etc.). Given the success of this symposium it was resolved that the Fifth TG-SMM symposium will be held in St Petersburg in 2019.

V.PESHEKHONOV, L.VITUSHKIN

