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Foreword

Dear Readers,

The main IASPEI activity during the last months was the preparation of the scientific program for our next Scientific Assembly. This Assembly will be held together with the International Association of Geodesy (IAG) in Kobe, Japan, next year. Then, we have several IASPEI related announcements: a call for proposals for the IASPEI Medal 2017, a proposal for a new IASPEI award, and news from the IASPEI web-site.

In this issue of the IASPEI Newsletter you can also find reports from the 35th General Assembly of the European Seismological Commission and a connected Training Course, which were held in Trieste, Italy, at the beginning of September, and from an IUGG sponsored and IASPEI endorsed workshop in Apatity, Russia.

With deep sorrow, I have to add to this Newsletter an obituary for a colleague, who recently passed away.

Please don't forget to inform me about international conferences and workshops with IASPEI related topics. Then, I can add these events to the Meetings Calendar of future Newsletters.

Johannes Schweitzer Secretary General

Joint scientific assembly of IAG and IASPEI 2017



The joint scientific assembly of IAG (International Association of Geodesy) and IASPEI will be held at the Kobe International Conference Center, Japan, from July 30 through August 4, 2017.

The city of Kobe experienced a disastrous earthquake in 1995 with about 6,000 casualties, but has completely recovered. The surface rupture appeared on Nojima fault on Awaji Island is today preserved as a museum. Currently, seven IAG symposia, 30 IASPEI symposia and nine joint symposia are proposed.

The details of these symposia and abstract submission will be announced on the conference website in December.

The abstract submission and application for travel support will be closed on February 8, 2017. For further details, visit the Assembly website: <u>http://www.iag-iaspei-2017.jp/</u>

Call for IASPEI Medal 2017 nominations

The award of a IASPEI medal has been decided during the 2011 General Assembly in Melbourne.

The IASPEI medal is awarded for merits in seismology: for sustaining IASPEI goals and activities and for scientific merits in the field of seismology and physics of the Earth's interior. The IASPEI Bureau is in charge of taking the decision about who, among the candidates nominated at large, will be the medal recipient.

Until now, the IASPEI Medal has been awarded to Robin Adams (2013) and Willie H.K. Lee (2015).

Nominations of candidates for the IASPEI Medal 2017 are due until January 31, 2017.

Please send nominations with attached a CV of the candidate and a letter of motivation for the nomination to:

Johannes Schweitzer, IASPEI Secretary-General (iaspei@norsar.no)

IASPEI Early Career Scientist Award

The IASPEI Bureau has established an **IASPEI Early Career Scientist Award** program aimed at engaging excellent young researchers in the IASPEI community. Each of the four IASPEI Regional Commissions will be asked to select one Early Career researcher (graduate student, postdoctoral research, pre-tenure faculty member) from their commission at each even-year Assembly of that Regional Commission.

The four awardees will then be provided with registration waivers and partial travel expense reimbursement (with combined total cost not to exceed \$1500/awardee) for attendance at the subsequent odd-year IASPEI Assembly. The awardees will be recognized during the IASPEI business meeting at the Assembly that they attend.

The Regional Commissions are free to determine their own procedure for selecting their awardee, but should inform the Bureau of the selection when submitting the report on their Regional Assembly. Selection of awardees should take into consideration research excellence and potential for career involvement with IASPEI, ensuring equal access with regard to gender and ethnicity.

The first IASPEI Early Carrier Scientist Awards will be chosen for the 2019 IASPEI General Assembly in Montreal, Canada.

News from the IASPEI Website

During the last months, the IASPEI Webmaster Przemyslaw Ozgo has (ISC) redesigned the IASPEI Website (<u>www.iaspei.org</u>) and rewritten the software code by using an open source software package (CMS Neos) to meet 21st century web requirements. This ensures the new IASPEI website can be viewed on all mobile devices and more varieties of web-browsers.

The web-site has also been restructured and its contents rearranged. It is planned to make IASPEI related documents available via the web-site. If you have any suggestions or additional material to be shown, or you see any errors please do not hesitate to inform the IASPEI Secretary General (iaspei@norsar.no).

Report: 35th General Assembly of the European Seismological Commission (ESC)

The 35th General Assembly of the European Seismological Commission was held in Trieste, Italy between 4 and 9 September, successfullv organized bv the Istituto Nazionale di **O**ceanografia е **G**eofisica **S**perimentale (OGS). There were 536 participants from 50 countries. A total of 615 abstracts were submitted, 349 for oral and 266 for poster presentations. There were six keynote speakers on actual seismological topics. The 2nd Inge Lehmann Award Lecture was delivered by Professor Barbara Romanowitz on the topic 'Global imaging of the Earth's mantle in the era of numerical wavefield computations'. Professor Mustafa Erdik was the Prof. Nicholas Ambraseys Distinguished Award Lecturer on the topic of seismic risk assessment. There was a joint session with the Seismological Society of America 'Advances in noninvasive on approaches to characterizing seismic site conditions' and a joint session with the Association European Earthquake of Engineering on 'Engineering seismology in the risk evaluation of built environment'. Ten best students' posters were awarded the **ESC-Springer Student Award.**

During the week before the ESC General Assembly (29 August – 3 September 2016) the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste organized together with the ESC and sponsored by IASPEI and OGS a workshop titled 'School on Seismology bevond Textbooks'. A shortened version of the workshop report is attached. The full report will be available from the ESC website (http://www.esc-web.org/).

The workshop programme involved a series of lectures, seminars, discussions and practical exercises in the following topics: Earthquake source estimation and related uncertainties; Seismic ambient noise imaging and monitoring; Non-linearity in soil response; Seismology vs. geotechnical engineering; Understandings and misunderstandings in probabilistic seismic hazard analysis.

The Programme was specifically designed to benefit PhD students and early career scientists that are actually working in seismology or related fields.



There were a total of 65 participants (see picture) from Europe, Africa, Asia and Southern, Central and Northern America. The largest nationality groups came from I.R. Iran (8 participants), Italy (7) and Egypt (6). African and Asian participants were mostly male except for the Iranians. There were 36 participants from fourteen ESC member countries and three from two ESC observer countries. The ESC member countries of Southern and eastern Central Europe were best represented.

Report: X International Workshop "Physics and Forecasting of Rock Destruction" (Failure 2016)

The Xth International Workshop "Physics and Forecasting Destruction" of Rock (http://www.xmsc.ru) was held in Apatity, Murmansk region, Russia, 13 - 17 June, 2016. This Workshop was combined with the VI Russian-China Scientific Forum "Challenges of Non-linear Geomechanics at Large Depths", which were thematically close to each other. Both conferences have been organised by the Mining Institute Kola Scientific Center of Russian Academy of Sciences (RAS).



Workshop participants

The Workshop and Forum were aimed at improvement of information exchange between scientists of different Russian regions and foreign countries concerning the modern achievements in multidisciplinary investigations in the area of regularities of decrease rocks destruction and of engineering-seismic risk. The goals of the meeting correspond to the main aims of IASPEI Commission on Earthquake Generation Process: Physics, Modeling and Monitoring for Forecast.

The workshop work took place in three scientific directions. The first direction was focused on problems of the theory of rock destruction, mathematical and physical modeling of processes in the sources, the spatial-temporal patterns of development of earthquake sources, rock bursts, influence of trigger mechanisms on the processes of instability of rocks.

The second direction was dedicated to the discussion of problems of catastrophe theory and phase transitions in energetically open systems under conditions of self-organized criticality, and collective behavior of cracks.

The third area was related to precursors of earthquakes and the methods of their separation from the background seismic noise, as well as new approaches of earthquake forecast, prognostic methods and algorithms, methods and software to identify precursory anomalies using a complex of seismological, geophysical, hydrodynamical and geochemical parameters.

Alexey Zavyalov, Vice Chairman of Workshop and Forum

(This is a shortened version of the report, which will be fully published on the IASPEI web-site (<u>http://www.iaspei.org/assemblies-conferences</u>).

News from the IUGG

The IUGG would like to distribute their monthly electronic newsletter, the **IUGG Electronic Journal** (<u>http://www.iugg.org/</u><u>publications/ejournals/</u>) to a wider community and asked IASPEI for the list of IASPEI email addresses.

Please inform the IASPEI Secretary General (<u>iaspei@norsar.no</u>) if you have any objections that your email address is copied to IUGG or if you are not interested to receive the **IUGG Electronic Journal**.

OBITUARY



Paolo Gasparini

(1937 - 2016)

Paolo Gasparini, professor emeritus of Solid Earth Physics at the University of Naples, Federico II, eminent scientist and volcanologist and prominent celebrity within the international scientific community, died last summer, July 28, 2016.

Paolo Gasparini started his academic and research career at the institute of Earth Sciences of the University of Naples. In 1970 he became full professor of Solid Earth Physics, director of the institute of Earth Sciences, as well as the Head of the Mt. Vesuvius Observatory, role that was long maintained until 1983.

Thanks to his impulse, the group of Geophysics and Volcanology of the University was born and has become, in the following years, one of the leading groups for the quality of the research activities, within the Italian and international scientific community. During his 40 years of academic career, he has covered numerous prestigious roles, being part of national and international committees. Among them, we remind the five vears as President of the International Association of Volcanology and Chemistry of the Earth's Interior and the management of the National Group of Volcanology. As an academician, Paolo Gasparini has covered many institutional roles, always devoting to the University his knowledge of Earth Sciences and his competences on the evaluation of environmental risks, mostly related to earthquakes and volcanic eruptions.

For his entire research career, Paolo Gasparini has always aimed at ambitious scientific goals, by investigating frontier topics of Geophysics and Volcanology and reaching innovative and high-impact results for the scientific community. The launch of tomographic experiments on Mount Vesuvius and Campi Flegrei area and the supervision of these projects, which have led to the identification of the major magmatic reservoirs of Neapolitan volcanoes, are owed to his original ideas and to his capacity of conceiving futuristic projects.

Paolo Gasparini loved to face scientific difficult challenges, impossible to a certain extent, because of his genuine sense of a traditional scientist; the sense of being at the frontier of the research, where the most arduous scientific issues, the "big challenges", are solved.

Very recent is the successful experimentation on the Earthquake Early Warning Systems, for the real-time mitigation of the damage produced by a seismic event. Earthquake Early Warning is a frontier topic in Seismology and Engineering Seismology research and its main goal is to develop methodologies and tools for the real-time the seismic risk mitigation.

The analysis and mitigation of the natural risks has been the major scientific goal of AMRA technological consortium (involving Federico II, INGV, CNR and other universities of Campania), that Paolo has created and guided with passion over the last ten years.

AMRA involves the most advanced competences in the field and has a leading national and international role in applied research and in the management of environmental risks and emergencies.

Finally, we all remember Paolo's dedication to the teaching activity, followed with passion and enchant from most of his students. Coordinator of the PhD. Programme in Geophysics and Volcanology, in 2000 he founded the PhD. Programme in Seismic Risk, with the main purpose of creating expert researchers, with broad competences on all the aspects related to the seismic risk, from mechanical the generation of seismic fractures, to the propagation of seismic waves and to the seismic engineering.

Paolo has always had an active role in the research activity and has been leader and coordinator of numerous international projects. Through these projects, young and brilliant scientists from worldwide countries have developed their own talent and have achieved their ambitious and innovative scientific qoals. This voung scientific community, orphaned of enthusiasm and mentoring, has now the heritage of his knowledge and the challenging task to pursue his way; with perseverance, optimism and endless scientific curiosity.

Aldo Zollo, Professor of Seismology, University of Naples Federico II

Meetings Calendar

We report below titles, dates, places and websites of the forthcoming meetings relevant to the interests of IASPEI scientists. If you are aware of events not listed below, please inform the Secretary General.

<u>2016</u>

11th ASC General Assembly November, 25 – 27, 2016, Melbourne, Australia URL: <u>asc2016.asia</u>

AGU Fall Meeting December 12 – 16, 2016, San Francisco, USA URL: <u>http://fallmeeting.agu.org/2016/</u>

<u>2017</u>

16th World Conference on Earthquake Engineering (WCEE)

January 9 – 13, 2017, Santiago, Chile URL: <u>http://www.16wcee.com/</u>

10th International Workshop on Statistical Seismology (StatSei10)

February 20 – 24, 2017, Wellington, New Zealand URL: http://www.gns.cri.nz/statsei10

Annual Meeting of the Seismological Society of America

April 18 – 20, 2017, Denver, Colorado, USA URL: <u>http://www.seismosoc.org/meetings/</u>

CTBTO, Science and Technology (SnT) June, 26 – 30, 2017, Vienna, Austria

IAG – IASPEI: Joint Scientific Assembly

July 30 – August 4, 2017, Kobe, Japan URL: <u>http://www.iag-iaspei-2017.jp/</u>

AGU Fall Meeting

December 11 - 15, 2017, New Orleans, USA

<u>2018</u>

Latin American and Caribbean Seismological Commission (LACSC) and Seismological Society of America (SSA) joint meeting

April 24 – 26, 2018, San Juan, Puerto Rico

16th European Conference on Earthquake Engineering

June 18 – 21, 2018, Thessaloniki, Greece URL: <u>http://www.16ecee.org/</u>

36th General Assembly of the European

Seismological Commission (ESC) End of August / Beginning of September, 2018, Valletta, Malta

AGU Fall Meeting

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

<u>2019</u>

27th IUGG General Assembly July 8 – 17, 2019, Montreal, Canada

AGU Fall Meeting December 9 – 13, 2019, San Francisco, USA

General Information about IASPEI

The International Association of Seismology and Physics of the Earth's Interior is one of the eight Associations of the International Union of Geodesy and Geophysics [IUGG].

The other IUGG Associations are:

Int'l Association of Cryospheric Sciences [IACS]

Int'l Association of Geodesy [IAG]

Int'l Association of Hydrological Sciences [IAHS]

Int'l Association of Meteorology and Atmospheric Sciences [IAMAS]

Int'l Association for the Physical Sciences of the Oceans [IAPSO]

Int'l Association of Geomagnetism and Aeronomy [IAGA]

Int'l Association of Volcanology and Chemistry of the Earth's Interior [IAVCEI]

Scientific Assemblies

IASPEI holds an Ordinary General Assembly every four years in conjunction with each Ordinary General Assembly of IUGG. Between the General Assemblies, IASPEI holds a Scientific Assembly, sometimes meeting with one of the other Associations of IUGG.

Participation in IASPEI Activities

Since July 2015, all scientists participating in IASPEI activities are counted as **members** of IASPEI (see <u>http://www.iaspei.org/statutes.html</u>). IASPEI welcomes all scientists throughout the world to join in seismological research.

IASPEI is subdivided into a number of Commissions, many of which have working groups for the study of particular subjects in their general areas of interest. On occasion, these internal IASPEI groups issue their own newsletters or circulars and many maintain their own web sites. At the IASPEI Assemblies, the groups organize specialist symposia, invite scholarly reviews and receive contributed papers that present up-to-theminute results of current research. The IASPEI web site gives, or provides links to, information on the range of IASPEI activities.

The IASPEI Web site

IASPEI can be found on the web at: <u>http://www.iaspei.org/</u>

Contacting IASPEI

The Secretary-General is the main point of contact for all matters concerning IASPEI.

Dr. Johannes Schweitzer / IASPEI

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