IMU-Net 80: November 2016

A Bimonthly Email Newsletter from the International Mathematical Union Editor: Martin Raussen, Aalborg University, Denmark

CONTENTS

- 1. Editorial: Heidelberg Laureate Forum
- 2. CEIC: Notes and Comments
- 3. Call for Nominations for IMU prizes 2018
- 4. Call for Nominations for the Ramanujan Prize 2017
- 5. Inaugural IMU Breakout Graduate Fellowships awarded
- 6. African Diaspora Mathematicians Program (ADMP) Call for Applications
- 7. Merger of ICSU and ISSC
- 8. Pan African Congress of Mathematicians (PACOM 2017)
- 9. Mathematical Congress of the Americas (MCA 2017)
- 10. Subscribing to IMU-Net

1. EDITORIAL: HEIDELBERG LAUREATE FORUM Laureates of mathematics and computer science meet the next generation

The *Heidelberg Laureate Forum (HLF)* is a unique opportunity for young mathematicians and computer scientists to interact with leaders of their fields. These leaders are the laureates of the scientific top awards: the <u>Abel Prize</u>, the <u>Fields Medal</u>, the <u>Nevanlinna Prize</u>, the <u>Turing Award</u>, and (as of 2017) the <u>ACM Prize in</u> <u>Computing</u>. Together with them, 200 selected "young scientists" are invited: these are undergraduate and graduate students, as well as postdocs, from all over the world. For a week in September, they come together for a most memorable meeting consisting of formal lectures, panel discussions, workshops, excursions to the beautiful neighborhood, and further social activities. The idea is to inspire "leaders of the next generation" through personal interaction with current leaders and to encourage them for their future development. Of course, inspiration usually goes both ways: the young scientists are truly impressive people.

The young scientists are selected among applicants from all over the world by international panels coordinated by the scientific committee of the HLF. Some of them are nominated by national organizations, while most apply upon their own initiative. This unique opportunity might not be as well-known as it should, and we would like to encourage the communities of mathematics and computer science to spread the word to talented scientists of the next generation.

The Heidelberg Laureate Forum is an initiative of the <u>Klaus Tschira Foundation</u> in cooperation with the organizations awarding the prizes: the <u>Norwegian Academy of Science and Letters</u> (for the Abel Prize), the <u>International Mathematical Union</u> (for the Fields medal), the <u>Association for Computing Machinery</u> (for the Turing Award), as well as with the research centers <u>Mathematisches Forschungsinstitut Oberwolfach</u> and <u>Schloss Dagstuhl – Leibniz Center for Informatics</u>. Among the cooperation partners are also the <u>Lindau</u> Nobel Laureate Meetings: they have a long history of organizing similar annual meetings where Nobel Prize winners interact with young scientists. In this sense, the HLF closes a gap for the two subjects that are not supported by Nobel Prizes. The HLF was launched in 2013 initially for five years, but is meanwhile about to be extended as a lasting activity (the future forums are already scheduled until 2022).

The next Heidelberg Laureate Forum will take place 24-29 September 2017. Interested young scientists can apply until 14 February 2017. We look forward to many interesting applications for the coming year! We are also happy to accept volunteers for the panel that reviews the applications of young scientists.

More information can be found at <u>http://www.heidelberg-laureate-forum.org</u>

Dierk Schleicher Jacobs University Bremen, Germany Member of the HLF Scientific Committee

2. CEIC: NOTES AND COMMENTS

This note serves to remind all working in, or with mathematicians based in developing nations. One of the most useful things mathematicians can do to aid their colleagues working in low-income nations, is to post one's own work to <u>arXiv.org</u>. In that way, the broadest body of current work can become more easily accessible to all.

The International Center for Theoretical Physics (ICTP) has a program focus around scientific dissemination to developing countries. In particular, ICTP has a very informative overview page of special opportunities available for low-cost subscription to research literature. Please examine this page and consider how you might take advantage of these programs. In addition, the library at ICTP, offers a special program (registration required of individuals) for delivery of scientific articles: http://ejds.ictp.it/ejds/. Quoting the web site, "The electronic Journals Delivery Service (eJDS) gives scientists at institutions in least developed or low-income countries access to current scientific literature, mainly in the fields of physics and mathematics."

3. CALL FOR NOMINATIONS FOR IMU PRIZES 2018

The IMU seeks nominations for the following prizes to be awarded at the International Congress of Mathematicians 2018. Nominations should be sent by December 31, 2016 to the Prize Committee Chairs.

- Fields Medals. Awarded every 4 years on the ICM to recognize outstanding mathematical achievement for existing work and for the promise of future achievement; see award details <u>here</u>. Chair: IMU President <u>Shigefumi Mori</u>.
- Rolf Nevanlinna Prize. Awarded once every 4 years at the ICM, for outstanding contributions in mathematical aspects of information sciences; see award details <u>here</u>. Chair: <u>Tony F. Chan</u>.
- Carl Friedrich Gauss Prize. Awarded once every 4 years to honor a scientist whose mathematical research has had an impact outside mathematics either in technology, in business, or simply in people's everyday lives; see award details <u>here</u>. Chair: <u>Björn Engquist</u>.
- Chern Medal. Awarded every 4 years on the occasion of the International Congress of Mathematicians to an individual whose accomplishments warrant the highest level of recognition for outstanding achievements in the field of mathematics; see award details <u>here</u>. Chair: <u>Caroline Series</u>.

- Leelavati Prize, sponsored by Infosys, is intended to accord high recognition and great appreciation of the IMU and Infosys of outstanding contributions for increasing public awareness of mathematics as an intellectual discipline and the crucial role it plays in diverse human endeavors; see award details <u>here</u>. Chair: <u>Gert-Martin Greuel</u>.
- The ICM Emmy Noether Lecture is a special lecture at an ICM which honors women who have made fundamental and sustained contributions to the mathematical sciences; see details <u>here</u>. Chair: <u>Irene Fonseca</u>.

More information: <u>http://www.mathunion.org/general/prizes</u> Guidelines for nominations: <u>http://www.mathunion.org/general/prizes/nomination-guidelines/</u>.

4. CALL FOR NOMINATIONS FOR THE RAMANUJAN PRIZE 2017

The Ramanujan Prize for young mathematicians from developing countries has been awarded annually since 2005. The Prize is funded by the Department of Science and Technology of the Government of India (DST). It is administered jointly by the <u>Abdus Salam International Centre for Theoretical Physics</u> (ICTP), the International Mathematical Union (IMU), and the DST.

The Ramanujan Prize is usually awarded to one person, but may be shared equally among recipients who have contributed to the same body of work. The Prize is awarded annually to a researcher from a developing country who is less than 45 years of age on 31 December of the year of the award, and who has conducted outstanding research in a developing country.

The deadline for nominations is 1 February 2017. Nominations can only be made by using the online system. See https://www.ictp.it/aboutictp/prizes-awards/the-ramanujan-prize/call-for-nominations.aspx

5. INAUGURAL IMU BREAKOUT GRADUATE FELLOWSHIPS AWARDED

Thanks to a generous donation by the winners of the Breakthrough Prizes in Mathematics – Ian Agol, Simon Donaldson, Maxim Kontsevich, Jacob Lurie, Terence Tao and Richard Taylor – IMU (<u>The International</u> <u>Mathematical Union</u>) with the assistance of FIMU (<u>Friends of the IMU</u>) and TWAS (<u>The World Academy of</u> <u>Sciences</u>) launched past April a fellowship program to support postgraduate studies, in a developing country, leading to a PhD degree in the mathematical sciences.

The selection process of the recipients of the new IMU Breakout Graduate Fellowship has concluded with the award of full PhD grants to three students. The 2016 recipients are, listed in alphabetical order:

- **Do** Thai Duong is a Vietnamese PhD student at the Institute of Mathematics of the Vietnam Academy of Science and Technology nominated by Professor Pham Hoang Hiep from the same institution.
- María Alejandra **Ramírez Luna** is a Colombian PhD student at the Universidad del Valle, Colombia nominated by Professor Gonzalo García Camacho from the same institution.
- Abebe Regassa **Tufa** is an Ethiopian PhD student at the University of Botswana nominated by Professor Habtu Zegeye from Botswana International University for Science and Technology.

Further information:

http://www.mathunion.org/cdc/grants/imu-breakout-graduate-fellowship-program/awardees-2016/

6. AFRICAN DIASPORA MATHEMATICIANS PROGRAM (ADMP): CALL FOR APPLICATIONS

The <u>Commission for Developing Countries</u> (CDC) of the International Mathematical Union (IMU) is launching the African Diaspora Mathematicians Program (ADMP) to support establishment of partnerships between African Diaspora mathematicians and mathematics academic units at universities in Africa for the purposes of postgraduate training and research collaboration, among other activities.

Three partnerships will be funded for two years and, every year, the grant will cover the following costs for the African Diaspora mathematician: airfare, travel insurance, visa processing and living expenses for 3 to 6 weeks at the host university in Africa. In addition, there will be funds for acquisition of educational materials such as books, software, journals and other learning material for the host institution.

Before an application is submitted, African Diaspora mathematicians and mathematics academic units in Africa are encouraged to identify suitable partners and engage in appropriate planning.

For further requirements and application, please visit: <u>http://www.mathunion.org/cdc/grants/african-diaspora-mathematicians-program-admp/</u>

7. MERGER OF ICSU AND ISSC

At an extraordinary assembly of ICSU (<u>International Council for Science</u>) and ISSC (<u>International Social</u> <u>Science Council</u>), it was decided to start the process towards a merger of the two councils. The real decision will be taken in October 2017. In the meantime the Transition Task Force will detail the conditions of the merger.

The end result was rather clear with the overall vote among ICSU members (weighted between national members and unions) of 76.4 % in favor and 23.6% against. The ISSC members were almost unanimously in favor of the merger. The actual merger will require a 2/3 majority, and this will be put to a vote during a joint General Assembly of ICSU and ISSC in Taipei in October 2017.

The IMU is a member of ICSU.

8. PAN AFRICAN CONGRESS OF MATHEMATICIANS (PACOM 2017)

From 3rd-7th July 2017, the science faculty Mohammed V University in Rabat, Morocco, will host the 9th edition of the Pan African Congress of Mathematicians (PACOM 2017), under the item: "Mathematics at the heart of technological innovation and economic development of Africa". For detailed information on

abstract submission and conference registration visit the conference website www.fsr.ac.ma/PACOM2017/

9. MATHEMATICAL CONGRESS OF THE AMERICAS (MCA 2017)

The <u>second Mathematical Congress of the Americas</u> (MCA) will take place on July 24-28, 2017, at Centre Mont-Royal and McGill University, Montreal, Canada. The goals of the Mathematical Congress of the Americas are to highlight the excellence of mathematical achievements of the Americas in the international arena and to foster collaboration between the continents' mathematical communities.

10. SUBSCRIBING TO IMU-NET

There are two ways of subscribing to IMU-Net:

1. Click on <u>http://www.mathunion.org/IMU-Net</u> with a Web browser and go to the "Subscribe" button to subscribe to IMU-Net online.

2. Send an e-mail to <u>imu-net-request@mathunion.org</u> with the Subject-line: Subject: subscribe

In both cases you will get an e-mail to confirm your subscription so that misuse will be minimized. IMU will not use the list of IMU-Net emails for any purpose other than sending IMU-Net, and will not make it available to others.

IMU-Net is the electronic newsletter of the International Mathematical Union. More details about IMU-Net can be found at: <u>http://www.mathunion.org/IMU-Net/.</u> You can find here, for instance, detailed information about subscribing to the IMU-Net mailing list and unsubscribing from it.