# IMU-Net 76: March 2016

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

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# 1. EDITORIAL

I am writing this as a Member at Large of the <u>IMU Executive Committee</u>, serving a second term now. In my sixth year, I continue to find this a learning experience: it is enlightening to see how the talented and experienced colleagues on the EC deal with various matters, some requiring delicacy, so that the IMU can be as effective as possible in promoting mathematics.

The IMU does not have extensive financial resources, but it does have a currency of goodwill among mathematicians. There is also an appreciation of IMU as representing a worldwide community of scholars who pursue their intellectual interests, and whose work does ultimately benefit society in various ways, both material and cultural.

Thus the IMU can have influence in some situations, which may be of help to some colleagues in troubled situations, but care is also needed in exercising this influence, so as not to lose the non-partisan and universal character of the organization.

Another aspect of this universal character is in the strong efforts which the IMU makes to be as broadly representative of the mathematics community as possible.

One of the important tasks of the IMU EC is to nominate individuals in various capacities, either functioning directly on behalf of the IMU, or in roles where there is a need for mathematical expertise; here particular attention is paid to try and fulfill the task, keeping the specific objectives in mind, while also seeking to achieve regional and gender balance. The IMU strives to bring diversity to its choices, and that this has been an important priority for all of us on the EC.

I look forward to serving the rest of my term with the IMU EC. And on another note, I also look forward to seeing, and sometimes participating in, the preparations for the next ICM at Rio.

Vasudevan Srinivas

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#### 2. ICM 2018

From August 1st to 9th, 2018, Rio de Janeiro will host the <u>International Congress of</u> <u>Mathematicians (ICM)</u> in its largest and most traditional convention center: **Riocentro**, in the **Barra da Tijuca** neighborhood.

Subscription to the Congress <u>Newsletter</u> is now open.

The <u>General Assembly of the IMU</u> will be held in São Paulo, on July 29 - 30, 2018.

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#### 3. IMU-CDC: NEW PROGRAM FOR DEVELOPING COUNTRIES

The first call of the new program **IMU Breakout Graduate Fellowship** will be open from the 15<sup>th</sup> April to the 15<sup>th</sup> June.

Thanks to a generous <u>donation</u> by the winners of the Breakthrough Prizes in Mathematics - Ian Agol, Simon Donaldson, Maxim Kontsevich, Jacob Lurie, Terence Tao and Richard Taylor - IMU with the assistance of <u>FIMU</u> (Friends of the IMU) and <u>TWAS</u> (The World Academy of Sciences) is launching a fellowship program to support postgraduate studies, in a developing country, leading to a PhD degree in the mathematical sciences. The IMU Breakout Graduate Fellowships will offer a limited number of grants for excellent students from developing countries.

Professional mathematicians are invited to nominate highly motivated and mathematically talented students from developing countries who plan to complete a doctoral degree in a developing country, including their own home country. Nominees must have a consistently good academic record from the high school level and must be seriously interested in pursuing a career of research and teaching in mathematics.

For a nomination to be eligible, the country of citizenship of the student, the country of residency and the country where the study will take place must be contained in the list of Developing Countries as defined by IMU for the period 2016-2019. More information: <a href="http://www.mathunion.org/cdc/">http://www.mathunion.org/cdc/</a>.

Olga Gil-Medrano Secretary for Policy of the CDC

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#### 4. IBNI PRIZE AWARDED

On February 3, the Ibni Oumar Mahamat Saleh Prize for 2015 was awarded to Valaire Yatat Djeumen, a Cameroonian PhD student at the University of Yaoundé 1. The Prize will enable him to visit the research institute CIRAD in Montpellier, France, in the framework of his PhD on mathematical models of ecosystems.

The prize has been funded by a subscription. It benefits from the support of CIMPA and CDC-IMU (Committee for Developing Countries-International Mathematical Union).

For more information on the Chadian politician and mathematician Ibni Oumar Mahamat Saleh, the circumstances of his abduction, and the prize itself, please consult <u>http://www.univ-orleans.fr/en/prixibni</u>.

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#### 5. IMU-CWM ANNOUNCES PROJECT WINNERS

Following its funding call in December 2015 for initiatives aimed at establishing or supporting networks for women in mathematics, the <u>IMU Committee for Women in Mathematics (CWM)</u> has announced that in 2016 it will be funding seven of the nearly 50 submitted proposals. Events will take place in Colombia (for Latin America), India, Indonesia (for S. and E. Asia), Kazakhstan (for Central Asia), Mexico (for Latin America), Senegal (for West Africa), and Tunisia (for North Africa).

In 2015-16, similar activities were also funded in Kenya (for Africa) and Brazil (for Latin America).

More information: http://www.mathunion.org/cwm/events/cwm-sponsored-events/

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# 6. ANNOUNCEMENT OF A NEW INTERNATIONAL MATHEMATICS OF PLANET EARTH (MPE) COMPETITION

A <u>second international MPE competition</u> for science museum exhibits (modules) was announced at the <u>Next Einstein Forum</u> in Dakar, Senegal on March 10 2016. The competition is organized jointly by <u>Mathematics of Planet Earth</u> (MPE), the <u>International Basic Science Program</u> (IBSP) at UNESCO, the International Mathematical Union (IMU), the <u>International Commission of</u> <u>Mathematical Instruction</u> (ICMI) and <u>IMAGINARY</u>.

The modules submitted to the competition will enrich the virtual <u>Open Source MPE Exhibition</u>. They can be downloaded and adapted by science museums and schools and can serve as examples for inputs for the new competition. The modules submitted can be of four types:

- Program: An interactive software exhibit to be used either on the web or in a museum.
- Hands-on: A module explaining how to realize a physical module in a museum.
- Film: A short video that can be shown in an exhibition.

- Image gallery: A collection of images accompanied of their mathematical description.

The deadline for the new MPE competition is June 30 2017, and the competition will be judged by an international jury.

Prizes:

- First prize: 5000 USD
- Second prize: 2000 USD
- Third prize: 1000 USD
- Special prize for African module: 2000 USD.

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## 7. ABEL PRIZE 2016 AWARDED TO SIR ANDREW WILES

The Norwegian Academy of Science and Letters has decided to award the Abel Prize for 2016 to Sir Andrew J. Wiles (University of Oxford) "for his stunning proof of Fermat's Last Theorem by

way of the modularity conjecture for semistable elliptic curves, opening a new era in number theory." In 1994 Wiles cracked Fermat's Last Theorem, which at the time was the most famous, and long running, unsolved problem in the subject's history. Andrew J. Wiles will receive the Abel Prize from H.R.H. Crown Prince Haakon at an award ceremony in Oslo on 24 May.

More information: http://www.abelprize.no/seksjon/vis.html?tid=67109

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# 8. V CONGRESO LATINOAMERICANO DE MATEMÁTICOS

The <u>V Congreso latinoamericano de matemáticos</u> under the auspices of Unión Matemática de América Latina y el Caribe (UMALCA) takes place in the period July 11-15, 2016, at the Universidad del Norte, Barrranquilla, Columbia.

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# 9. 7ECM 2016

The quadrennial Congress of the European Mathematical Society, <u>7ECM</u>, will be held in Berlin, Germany, July 18 - 22, 2016. The program contains ten plenary lectures, 31 invited lectures, several prize lectures, the Hirzebruch Lecture, the Abel Lecture, several history and public lectures, 43 mini-symposia, and much more. Almost 100 grants have been offered to mathematicians from less developed countries. More than 1000 participants have already registered. Early registration ends on 31 March 2016!

The event is preceded by the <u>Council of the European Mathematical Society</u> at Humboldt University, Berlin, on July 16-17. Council will have to choose between two bids for the 8ECM in 2020; one from Portoroz (Slovenia) and one from Seville (Spain). It elects two new vice-presidents and five members of the executive committee.

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## 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.

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