

# THE INTERNATIONAL MATHEMATICAL UNION

# IMU

## 1. About the IMU

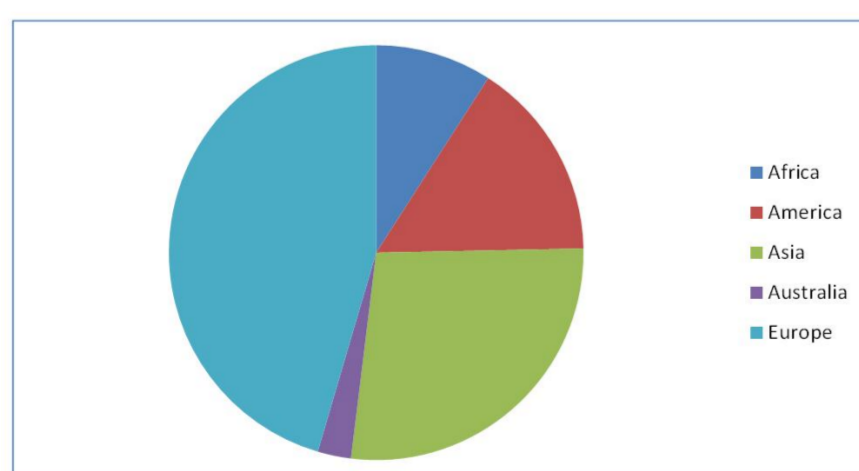
IMU, a member of the International Council for Science (ICSU), is a non-governmental, non-profit scientific organization.

### Objectives:

- Promote international cooperation in mathematics.
- Support and assist the International Congress of Mathematicians and other international scientific meetings or conferences.
- Encourage and support other international mathematical activities considered likely to contribute to the development of mathematical science in any of its aspects, pure, applied, or educational.

### Structure:

- *Members* are countries who are represented in IMU through Adhering Organizations (AOs). IMU currently has 69 full members, 8 associate members, and 4 affiliate members.
- IMU's governing body is the *General Assembly (GA)* made up of the AO delegates and representatives and the *IMU Executive Committee* that is elected by the GA and conducts the business of the Union. The permanent *Secretariat*, based in Berlin, runs IMU's day to day business, provides support for many IMU operations, and hosts the IMU archive.
- *Commissions and Committees*: International Commission on Mathematical Instruction (ICMI), Commission for Developing Countries (CDC), International Commission on the History of Mathematics (ICHM), and Committee on Electronic Information and Communication (CEIC).



Proportional IMU membership distribution

### History in a nutshell:

The foundation of IMU was initiated in 1919 and formally completed in 1920 at the International Congress of Mathematicians in Strasbourg. Under difficult political circumstances IMU faded away in the years 1931-1936. IMU came into being again in the years 1950/1952, at the General Assembly in Rome 1952 the activities of the new Union were inaugurated, the

first President and Executive Committee were elected and IMU was readmitted to ICSU.

## 2. The ICM and IMU Prizes

To support and assist the International Congress of Mathematicians (ICM) is an outstanding activity of the IMU. The ICM takes place every four years and unites mathematicians from all its branches and from all over the world. At the ICM Opening Ceremony the scientific prizes of IMU are awarded:



Fields, Nevanlinna, Gauss, and Chern medals

- *Fields Medal* – for outstanding mathematical achievement for existing work and the promise of future achievement.
- *Rolf Nevanlinna Prize* – for outstanding contributions in mathematical aspects of information sciences.
- *Carl Friedrich Gauss Prize* – for mathematical research that has had an impact outside mathematics.
- *Chern Medal Award* – for accomplishments that warrant the highest level of recognition for outstanding achievements in the field of mathematics.

ICMs of recent times were in Beijing (China), 2002, Madrid (Spain), 2006, and Hyderabad (India), 2010. The next ICM will be held in Seoul, Republic of Korea, in 2014. Preregistration is open.



Hyderabad 2010: IMU Prize winners and the President of India

## 3. The IMU EC 2011-2014

- President: I. Daubechies (US)
- Secretary: M. Grötschel (DE)
- Vice Presidents:
  - C. Rousseau (CA), M. Viana (BR)
- Members at Large:
  - M. de León (ES), Y. Long (CN), C. Praeger (AU), V. Srinivas (IN), J. Toland (UK), W. Werner (FR)
- Ex Officio: L. Lovász (HU)

## 4. IMU Commissions & Committees and their Objectives

### International Commission on Mathematical Instruction (ICMI)

- Advance the development of mathematical education at all levels, offer a forum to promote reflection, collaboration, exchange and dissemination of ideas on teaching and learning of mathematics.
- Facilitate transmission of information on all aspects of theory and practice of contemporary mathematical education from an international perspective.
- Link between educational researchers, curriculum designers, educational policy makers, teachers of mathematics, mathematicians, mathematics educators and others.

### Commission for Developing Countries (CDC)

- Manage, strengthen, and promote the programs of the IMU in developing and economically disadvantaged countries.
- Search for funding to support the corresponding activities.
- Establish institutional partnerships with scientific organizations with common goals.

### International Commission on the History of Mathematics (ICHM)

- Inter-union commission joining the International Mathematical Union and the Division of the History of Science (DHS) of the International Union for the History and Philosophy of Science (IUHPS).
- Encourage the study of the history of mathematics.
- Promote a high level of historically and mathematically sophisticated scholarship in the field.



Commissions and Committees of IMU

### Committee on Electronic Information and Communication (CEIC)

- Standing committee of the IMU EC with the mandate to advise on matters concerning information & communication.
- Review the development of electronic information, communication, publication, and archiving. Publicise relevant developments to the wider community.
- Advise about potential opportunities to endorse standards on publication & communication related issues, to foster the growth of electronic infrastructure, create tools for this purpose.