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Committee for
Women in Mathematics

International Congress for Women in Mathematics: Hyderabad, Seoul



International Congress of Mathematicians



SEOUL
ICM
2014

Committee for Women in Mathematics



Committee for Women in Mathematics

- Committee of the International Mathematical Union
- Created in March 2015
- The only international Committee for Women in Mathematics!
- Our website www.mathunion.org/cwm

Committee for Women in Mathematics

- Carolina Araujo (Brasil)
- Bill Barton (New Zealand)
- Ari Laptev (Sweden)
- Kristin Lauter (USA)
- Sunsook Noh (Korea)
- Marie Françoise Ouedraogo (Burkina Faso)
- Sujatha Ramdorai (India)
- Marie-Françoise Roy (France, Chair)
- Caroline Series (UK, Vice-Chair)
- Betül Tanbay (Turkey)

EC liaison: John Toland

The bottom right corner of the slide features a collage of mathematical formulas. Visible formulas include the binomial expansion $(x-b)^2 + c^2)^n = \sum_{k=1}^n \frac{A_k}{((x-b)^2 + c^2)^{n-k}}$, the beta function $B(p, q) = \frac{\Gamma(p)\Gamma(q)}{\Gamma(p+q)}$, and the gamma function $\Gamma^{(n)}(y) = \int_0^{\infty} \frac{t^{y-1} e^{-t}}{D(x)} dt$. There are also some less legible formulas involving $p(x)$ and $n(x)$.

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PURPOSE

The aim of the International Mathematical Union's Committee for Women in Mathematics (CWM) is to promote international contacts between national and regional organizations for women and mathematics. More information can be found on CWM's extensive website www.mathunion.org/cwm

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NETWORKS

One of CWM's first aims is to help establish networks of female mathematicians at the large scale –i.e. continental– level, particularly in developing or emerging regions. In 2016, IMU funding enabled it to support seven groups from Columbia to Kazakhstan and from Bali to Senegal, whose key focus is to set up multi-national, non-subject specific networks in their regions. There is a new call for projects for 2017, see the CWM website for details.

Committee for Women in Mathematics

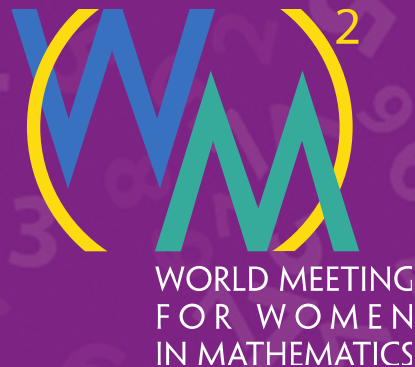
PARTNERSHIPS

CWM aims to facilitate the circulation of information between organizations for women mathematicians, such as the Association for Women in Mathematics (AWM), European Women in Mathematics (EWM), Indian Women in Mathematics (IWM), the African Women in Mathematics Association (AWMA), and the many other national groups and committees already in existence. CWM is encouraging the formation of new networks in Central Asia, East Asia and Latin America and has funded activities of IWM and AWMA.

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(WM)²

CWM is organizing a satellite meeting of ICM2018 in Rio de Janeiro (Brazil): *World Meeting for Women in Mathematics* (WM)². With a Latin American focus, this will take place in Rio de Janeiro immediately before the ICM.



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WEBSITE

The CWM website is the only platform which collects information about the many and diverse activities for female mathematicians taking place worldwide. Besides news and resources, some thirty individual countries are listed providing a means for women to contact each other and giving them greater visibility.

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CWM AMBASSADORS

CWM has about 120 special correspondents worldwide. Each of these contacts has the job of disseminating information such as CWM funding calls in her mathematical neighbourhood, and also of keeping CWM informed about activities or initiatives to be announced on the CWM website.

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CWM SUPPORT IN 2015

- Cortona CWM launching meeting : African Women in Mathematics Association
- Website+first general meeting in Kenya
- Logo for (WM)²
- Meeting in Sao Paulo (Brazil)

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CWM SUPPORT IN 2016

- Support of 7 networks : Columbia, India, Indonesia, Kazakhstan, Mexico, Sénégal, Tunisia
- CWM meeting in Berlin
- CWM flyer and poster

$$\int_{-\infty}^{\infty} \frac{p(x) + i p(x, a)}{((x-b)^2 + c^2)^n} dx = \sum_{k=1}^{n-1} \frac{A_k}{((x-b)^2 + c^2)^k} + \frac{1}{D(x)}$$
$$\Gamma^{(n)}(y) = \int_0^{\infty} x^{y-1} e^{-x} dx = \frac{1}{D(x)}$$
$$\Gamma^{(n)}(p, q) = \frac{1}{D(x)} \frac{\Gamma(p)\Gamma(q)}{\Gamma(p+q)}$$

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CWM CALL IN 2017

- Establishing or supporting networks for women in mathematics, preferably at the continental or regional level, and with priority given to networks in developing or emerging countries. Help could include, for example, funding meetings, travel for individuals for consultation purposes, or advice and support in creating websites. CWM will not normally fund activities taking place in the same or nearby location as one it has already funded in 2015 or 2016.

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CWM CALL IN 2017 (continued)

- Organizing a mathematical school open to all with all women speakers and mainly women organisers. This type of mathematical school, which should include a significant proportion of time devoted to background and introductory material, can be a very effective way of showcasing the contributions of women mathematicians and creating an opportunity for female students to be in touch with women leaders, without excluding male students. Expenses covered by CWM could include, for example, costs for speakers, women organisers, or for women participants.

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CWM SUPPLEMENTARY GRANTS

CWM invites applications for supplementary grants of up to €500

- to help women from developing countries or regions attend scientific events taking place from March 2017 to February 2018.
- to help women who already have funding to attend a conference or meeting or for scientific collaboration, but who need extra funds to make it possible (for example, for child care, separate accommodation, or more appropriate travel).

The list of developing countries used by the IMU and more details can be found on www.mathunion.org/cwm

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CWM PLANS IN THE FUTURE

- Launch the gender gap in mathematics index
- Define a convincing indicator
- Data should be simple to collect (or already exist)
- Comparison of countries in terms of gender equality in mathematics
- No clear connection with gender equality in general
- Two examples
 - northern european countries (Sweden Denmark) promote gender equality but have very few women in mathematics
 - many women in mathematics in Iran