



Importance of “Women in Mathematics” Associations

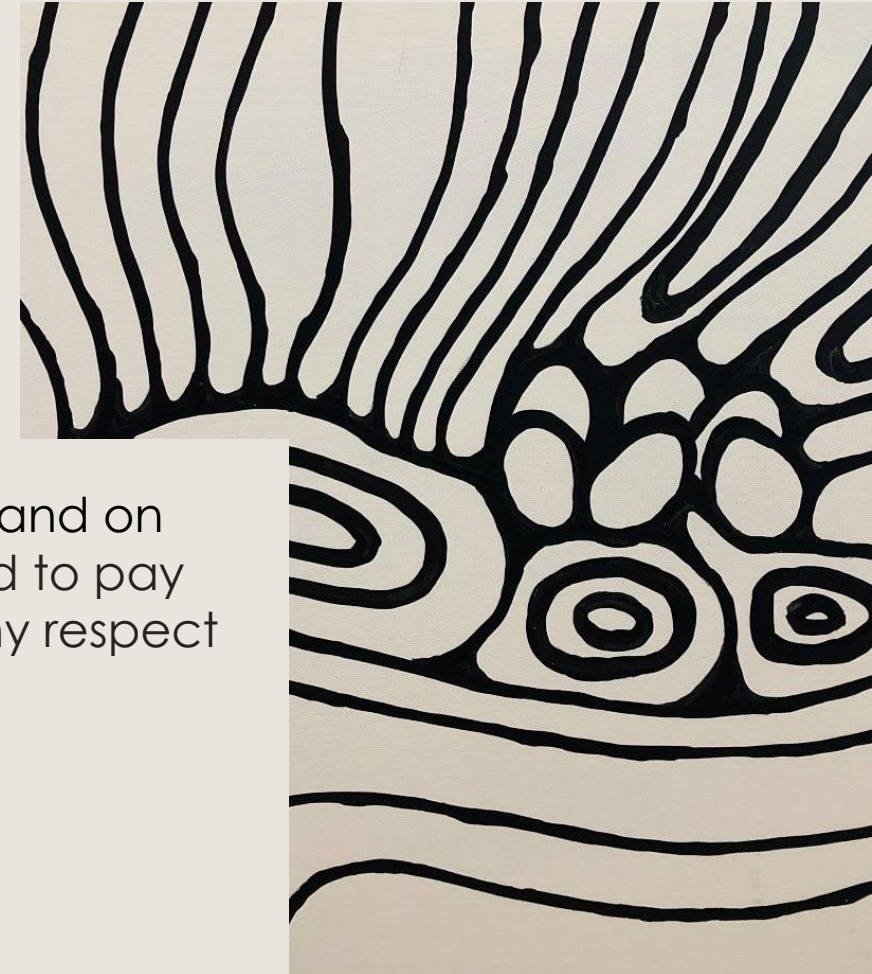
Cheryl E Praeger

24 / April / 2023

Asian-Oceanian Women in Mathematics

Acknowledgement of country

I wish to acknowledge the traditional custodians of the land on which I am speaking: the Whadjuk Noongar people, and to pay my respects to their elders past and present. I also pay my respect to any First Nations people present this evening.



Artist: Dr Richard Barry Walley OAM

Celebrate AOWM “Born” 2023



**Congratulations and thank you to
all who worked towards the
establishment of AOWM**

Diverse region – women
mathematicians in many countries

National associations for women in
mathematics established recently



Champion:
Motoko Kotani

My hope for this lecture

- 1 Women in Mathematics – Asia/Oceania; an Australian perspective
- 2 Women's participation in mathematics internationally
- 3 Challenges and opportunities

Diversity of WiM

Across Asia and Oceania

2009 Indian Women in Mathematics

I have worked with women in mathematics in Thailand, Phillipines, Korea, China, Iran, ...

I hope this new regional association will strengthen our links

Celebrating Indian Women Mathematicians on #WorldMathsDay



Neena Gupta

Sujatha Ramadorai

R. Parimala

Vanaja Iyengar



Riddhi Shah

Suneeta Varadarajan

Kaneenika Sinha

Mythily Ramaswamy

Pooja Singla

International Day for Women in Mathematics

Australian experience



1852 University of Sydney (first university)

1881 Women students admitted (equal basis to men)

1921 First woman lecturer in mathematics (Margaret Barr Moir, University of Western Australia)

1964 First woman Professor of Mathematics (Hanna Neumann, Australian National University)



Australian experience

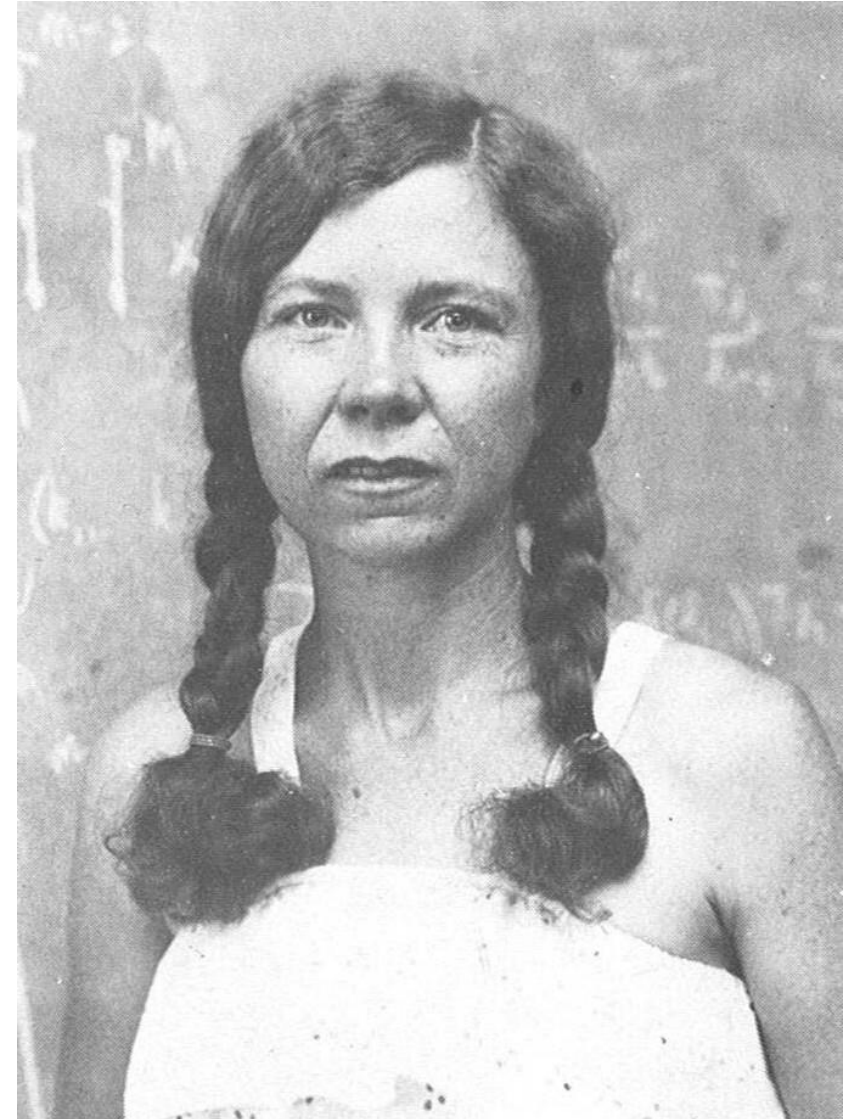


1983 CEP Second woman maths professor in Australia - University of Western Australia

1992 CEP First woman president Australian Mathematical Society ... next woman to be president was Nalini Joshi in 2008!

2006 onwards: annual get-togethers of women participants at annual AustMS meetings

2013 Formation of WIMSIG – our WiM



WIMSIG Conference 2017: Celebration of Women in Australian Mathematical Sciences

24-26 September 2017
 University of South Australia, City West Campus, Adelaide

<http://www.austms.org.au/WIMSIG-conference-2017>
 #WIMSIG2017



WIMSIG: active role supporting women in mathematics



12 Special Sessions

- Algebra and Discrete Mathematics
- Analysis and PDEs
- Biostatistics and Bioinformatics
- Cryptography, Coding and Compression
- Dynamical Systems and Fluid Dynamics
- Gender Equity and Diversity in Mathematics
- Geometry and Topology
- Industrial Mathematics
- Mathematical Biology
- Mathematical Physics
- Operations Research and Optimisation
- Statistics

**Professional Development Workshop:
 Shameless Self-Promotion**
 By Dr Maria Gardiner from ThinkWell

**Discussion Panel: Gender Equity Landscape in the
 Australian Mathematical Sciences**

Travel Grants
 Applications close at 5pm, Friday 25 August 2017

Thank you to our Sponsors:

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What WIMSIG does:

Small grants (travel, research)

Annual gatherings locally

Regular newsletters

Website

Conference 2017

Represented on AustMS Council and Conference Program, Prize committees

Consulted – policies affecting women, equity

Proactive/ lobbies

International experience

International Congresses of Mathematicians (ICM) and IMU

1897 First ICM - Zurich

4 women participants out of 208

No women speakers

1900 Paris ICM

David Hilbert (Göttingen, Germany)
famous lecture: list of 23 math
problems for the new century
shaped direction math research

1951 International Mathematical Union
(IMU) established



International experience

Women and International Congresses of Mathematicians (ICM)

1932 ICM – again in Zurich

Emmy Noether first woman to give
a plenary lecture at an ICM

58 years later:

1990 ICM in Kyoto

Karen Uhlenbeck second woman
ICM plenary speaker

Problem: visibility/participation by women



Women in Math. Assoc'ns



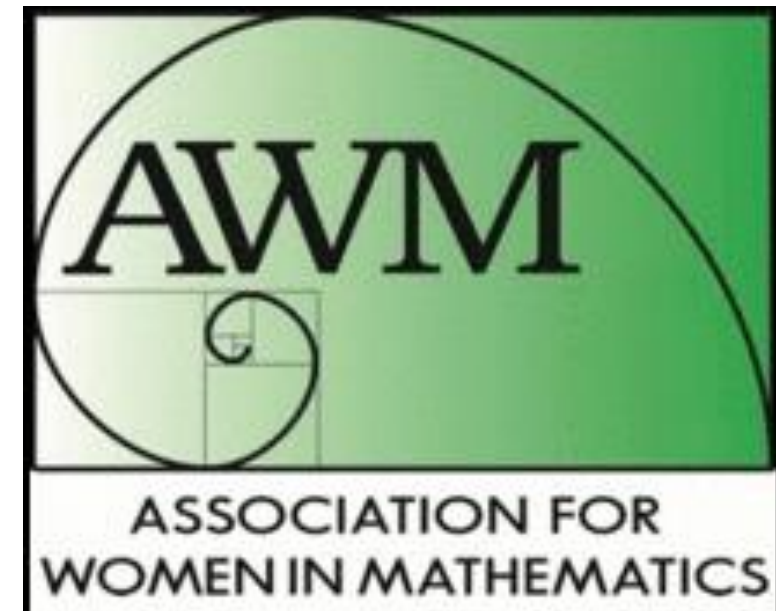
Before the 1990 ICM

1971 **Association for Women in Mathematics** AWM
(in the US) – with men and women as members

“to honour women who have made fundamental and sustained contributions to the mathematical sciences”

1980 AWM initiated: **Emmy Noether Lecture**
Annually at Joint Mathematics meeting of AMS

1994 Organised by AWM – **“Additional Emmy Noether lecture”** presented at ICM [each four years]



Women in Math. Assoc'ns

After the 1990 ICM

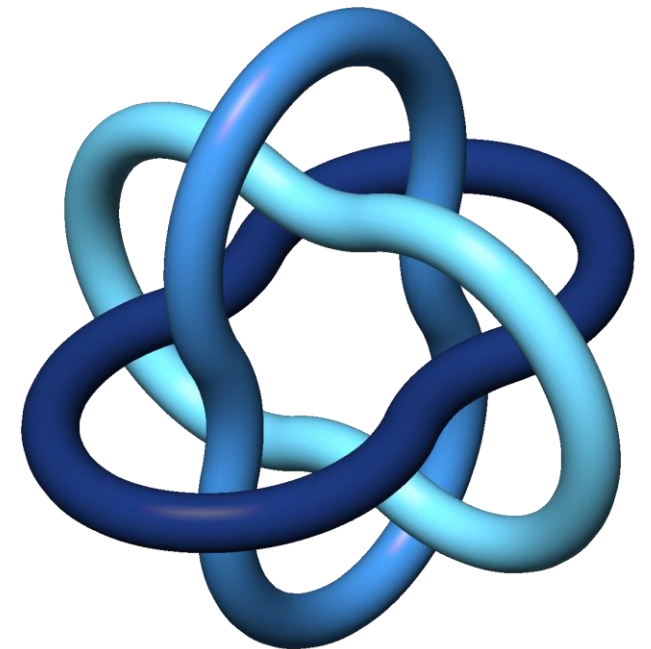
2002: General Assembly of International
Mathematical Union

- formalize the **ICM Emmy Noether Lecture**
- given in ICMs in 2006 and 2010
- Then reviewed

2010: General Assembly of International
Mathematical Union

- established the **ICM Emmy Noether Lecture**
- On-going – held each ICM

*“to honour women who have
made fundamental and
sustained contributions to
the mathematical sciences”*



Women and the IMU

IMU established 1951

- IMU Executive Committee (IMU EC) of 11 persons
 - President, 2 Vice-Presidents, Secretary General
 - 6 Members-at-Large
 - Immediate past President
- Elected at IMU General Assembly for a 4 year term
 - IMU GA held just before an ICM
- 2002 First IMU GA where a woman elected to IMU EC

2003-2006 First term with a woman on the IMU EC

- Ragni Piene (Norway)
- Chaired 1st ICM Emmy Noether Lecture Committee



Women and the IMU

2007-2010 First time two women on IMU EC

- Ragni Piene and Cheryl Praeger
- Can serve max two terms on an IMU EC
- Castle in Oslo for dinner
To celebrate 5th Abel Prize
Recipient in 2007



First women IMU President



2011-2014 First time three women on IMU EC

- President: Ingrid Daubechies
- VP: Christiane Rousseau
- M-at-L: Cheryl Praeger

- An IMU EC meeting at IMPA in Rio



IMU Committee for Women in Mathematics (CWM)



2015: established
[Ingrid's leadership]

Purpose:

To promote international contacts between national and regional organizations for women in mathematical sciences

Members appointed for 4 year terms



IMU Committee for Women in Mathematics (CWM)



2019-2022: Chair: Marie-Francoise Roy

Members included:

- Motoko Kotani
- Neela Nataraj
- Cheryl Praeger

From Asia-Oceania, and AOWM emerged from regional meeting of CWM Ambassadors



Thank you

For the invitation
to speak

**And I wish every
success to AOWM**

**and to women in
mathematics
everywhere**

