

Celebrating AWM's 50th Anniversary

Liangbing Luo

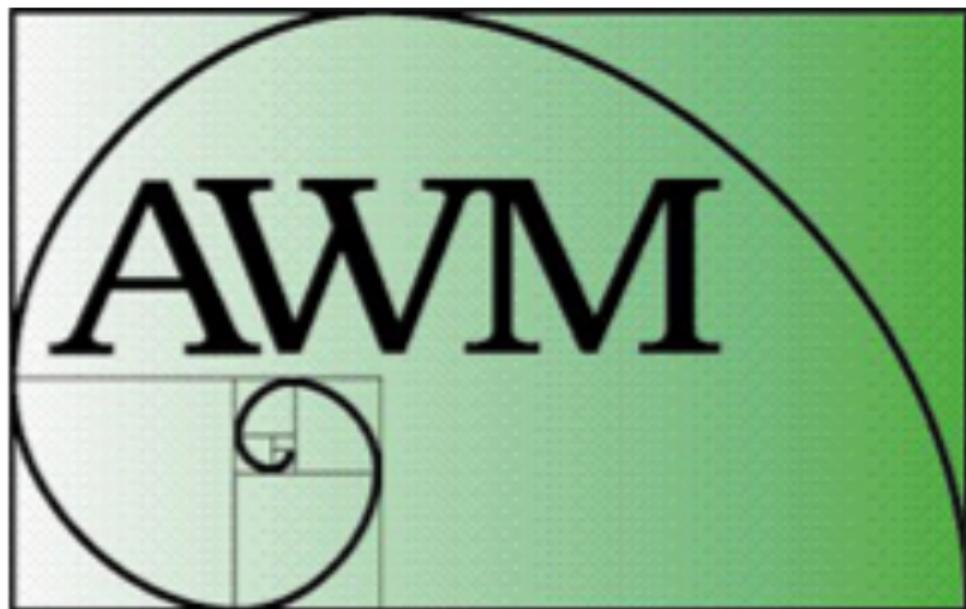
University of Connecticut

Special Sigma Seminar, Nov 11, 2021

Question

What is the full name for AWM?

Association for Women in Mathematics



Association for Women in Mathematics

Outline

- ▶ History of AWM
- ▶ AWM Student Chapter at UConn
- ▶ Some notable female mathematicians

1971-2021

1971-2021

“What do women want? Let me be specific as far as women mathematicians are concerned: 1) Equal consideration for admission to graduate school and support while there, 2) . . . for faculty appointments at all levels . . . , 3) Equal pay for equal work, 4) Equal consideration in assignment of duties, for promotion and for tenure, 5) . . . for administrative appointments at all levels in universities, industry and government, [and] 6) . . . for government grants, positions on review and advisory panels and positions in professional organizations. Because of past injustices, special efforts will have to be made for some time to find women to consider. AWM is ready to help. Now is the time for discrimination to end.” — Mary Gray

1971-2021

Mission

The purpose of the Association for Women in Mathematics is to encourage women and girls to study and to have active careers in the mathematical sciences, and to promote equal opportunity and the equal treatment of women and girls in the mathematical sciences.

AWM Student Chapter at UConn

First founded in 2018

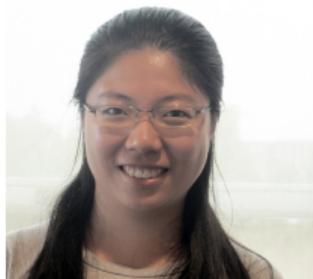
Faculty sponsors: Professor Masha Gordina and Professor Katie Hall

<https://awm.math.uconn.edu>

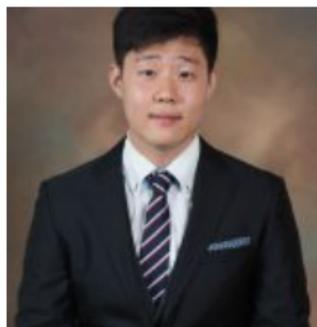
Our team



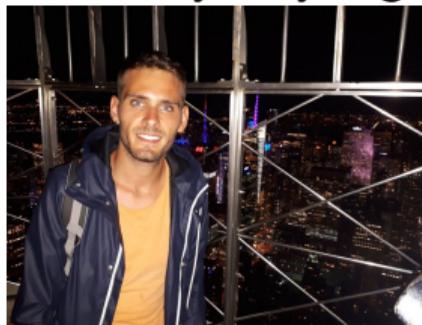
President: Anastasiia Minenkova



Vice President: Liangbing Luo



Secretary: Hyungue Lim



Web Master: Marco Carfagnini

Events at UConn

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- ▶ Invited talks & tea discussion

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- ▶ Invited talks & tea discussion
- ▶ Virtual film screening & discussion

Invited talks & tea discussion

Different fields of mathematics, such as algebraic geometry, cryptography, numerical analysis, etc.

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First event: jointly organized with AMS student chapter
(Feb 22, 2019)



Professor Emma Paviato

- ▶ “What is . . . An Elliptic Curve?” From Bitcoin to Self-Driving Vehicles
- ▶ Tea discussion

April 19, 2019



Department of Mathematics
Distinguished Lecture Series
Friday, April 19 at 3:30pm in Schenker 151

Mathematical ideas in public key cryptography

Jill Pipher
*Elisha Benjamin Andrews Professor of
Mathematics, Brown University
President, American Mathematical Society*



- ▶ Distinguished lecture by Professor Jill Pipher
- ▶ Tea discussion with Professor Jill Pipher

Meeting with Professor Björn Sandstede (Oct 3, 2019)



Professor Björn Sandstede

- ▶ Diversity, inclusion, and mentoring at Brown University
- ▶ Course on Race and Gender in the Scientific Society

Jointly organized with SIAM student chapter (Dec 6, 2019)



with Professor Misha Kilmer

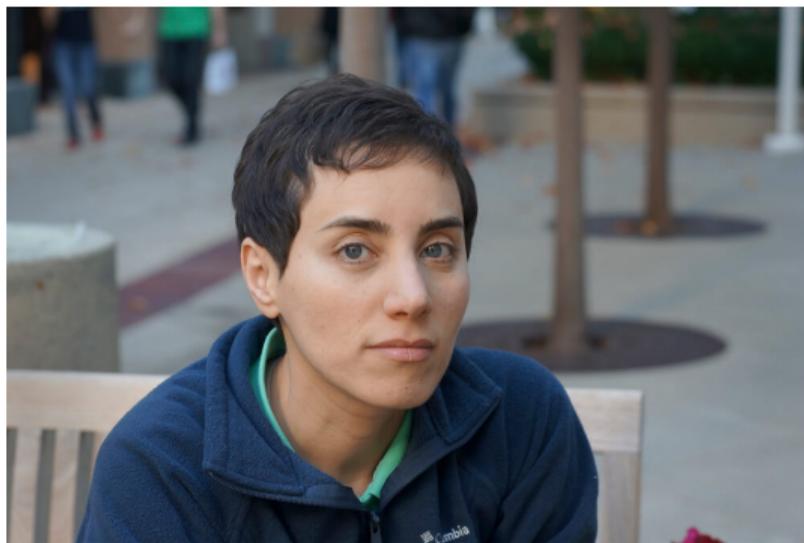
Virtual film screening & discussion

Virtual film screening & discussion

May 8, 2020

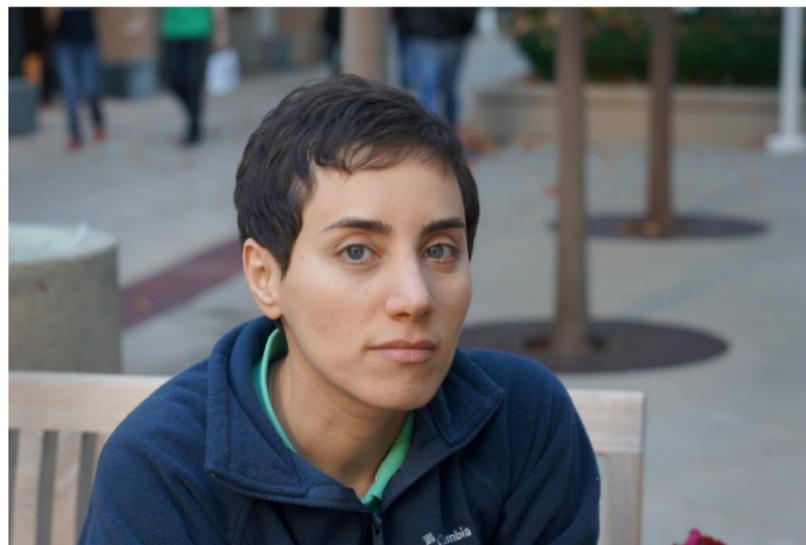
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May 8, 2020



Virtual film screening & discussion

Secrets of the Surface: the Mathematical Vision of Maryam Mirzakhani

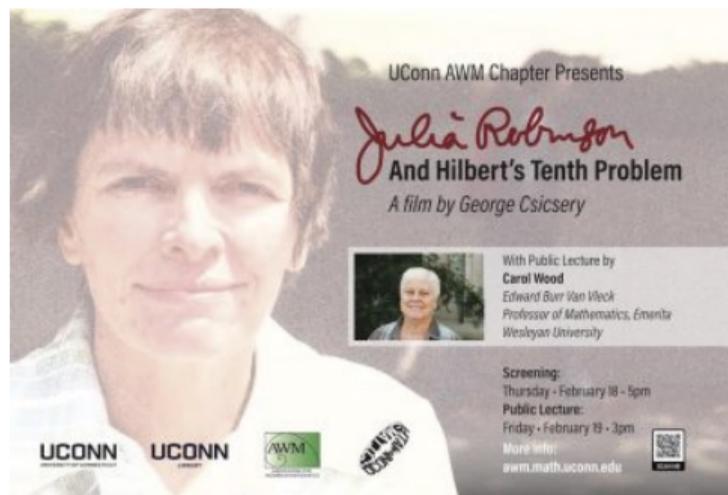


Julia Robinson extravaganza

Jointly organized with UConn Logic Group & AMS student chapter

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Julia Robinson and Hilbert's Tenth Problem (Feb 18, 2021)



Lecture by Professor Carol Wood (Feb 19, 2021)

Discussion



Professor Carol Wood



Professor Lenore Blum

Some Notable Female Mathematicians

Maria Gaetana Agnesi (1718–1799)



- ▶ A reader at the University of Bologna and chair of mathematics
- ▶ Witch of Agnesi
- ▶ *Istituzioni Analitiche ad uso della gioventù italiana*

Florence Nightingale (1820–1910)

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- ▶ The lady with the lamp
- ▶ Pioneer in statistics, polar area diagram
- ▶ First women to be elected to Fellow of the Royal Statistical Society

Mary Ellen Rudin (1924–2013)



- ▶ Set-theoretic topology
- ▶ Lecture at ICM in 1974
- ▶ Mary Ellen Rudin Young Researcher Award

Euphemia Lofton Haynes (1890–1980)



- ▶ The first African-American woman to earn a PhD in mathematics
- ▶ Mathematics education
- ▶ Served on and led various boards and committees for organizations
- ▶ Fellow of the American Association for the Advancement of Science in 1998

Hortensia Soto



- ▶ Mathematics education
- ▶ Las Chicas de Matemáticas
- ▶ MAA Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics in 2018 & Associate Secretary of the MAA

Olga Tsuberbiller (1885–1975)



- ▶ Mathematics education
- ▶ Problems and Exercises in Analytic Geometry in 1927
- ▶ Honored Scientists of the Russian Soviet Federative Socialist Republic in 1955

Charlotte Angas Scott(1858–1931)

- ▶ Algebraic geometry
- ▶ Mathematical Tripos exam
- ▶ The first woman to join the American Mathematical Society in 1891

Ling Long



- ▶ Modular forms, Galois representations, and hypergeometric functions
- ▶ Young Investigators Grant from the National Security agency
- ▶ Clay Mathematics Institute Liftoff Fellow in 2002, AWM Ruth I. Michler Memorial Prize in 2012
- ▶ Women in Number Theory (WIN)

Verdiana Grace Masanja/Verdiana Grace Kashaga



- ▶ Fluid dynamics and mathematical modeling
- ▶ Chair of the African Mathematical Union's Commission for Women Mathematicians (2000–2004), National Coordinator for Female Education in Mathematics in Africa

Pictures are from

<https://awm-math.org/>, <https://awm.math.uconn.edu>,

<https://www.bu.edu/math/people/faculty/algebra/previato/>,

<https://bjornsandstede.com/>,

<https://news.stanford.edu/2017/07/15/maryam-mirzakhani-stanford-mathematician-and-fields-medal-winner-dies/>,

https://en.wikipedia.org/wiki/Carol_Wood,

<http://www.cs.cmu.edu/~lblum/>,

<https://www.agnesscott.edu/lriddle/women/nightpiechart.htm>

Thank you!