



Queen Mary

University of London

Science and Engineering

# A Cross-Departmental Approach to Embedding EDI

HoDoMs Annual Conference 2026

Claudia Garetto, 30/04/2026

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# Some background about Queen Mary University of London

- East London location
- Over 32,000 university students
- 91% from state schools
- 77% are BAME
- 46% are first generation scholars
- In 2021 best university in the country for social mobility
- 2030 strategy: “the most inclusive university of its kind, anywhere”.



# School of Mathematical Sciences (25/26)

## Student profile

- 40% female
- 80% BAME

## Staff profile

- 22% female
- 33% BAME

**Providing our students with  
role models they can identify with**



# Diversifying the Maths Curriculum

- Booklet of short-biographies of mathematicians from under-represented groups
- Co-creation summer-project
- Link to modules on offer
- Available to all students
- Social media presence



# Booklet

## Diversifying the Maths Curriculum at Queen Mary University of London

Authors:

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Christo Morison  
Claudia Garetto  
Evelyn Lira Torres  
Julio Narciso Argota Quiroz  
María Fernanda Pintado Serrano

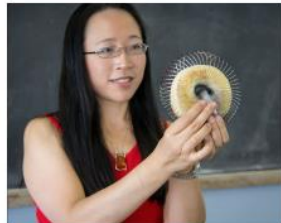
July 2022 - August 2023

## 16 Eugenia Cheng

### Category Theory; Mathematical Education

Keywords: Women, Chinese, Non-linear career, Outreach

Eugenia Cheng is a British mathematician, author, scientific educator and musician. She received her Ph.D. from the University of Cambridge for her research in higher category theory, an abstract algebraic field which looks at “*the mathematics of mathematics*”. After taking positions in the Department of Mathematics and University of Chicago and at the Université de Nice-Sophia Antipolis, Cheng chose in 2007 to move away from the “traditional” career of the mathematician in becoming a Scientist In Residence at the School of the Art Institute of Chicago. She still holds this position today, where she continues her research in higher category theory and teaches maths classes tailored to art students.



Cheng is perhaps best known for her public outreach, where she has the goal of ridding the world of “maths phobia”. She believes the kind of maths taught in school is very restrictive and not useful in most peoples lives, and instead promotes teaching maths in a philosophical and open-minded method as primarily a way of logical thinking. She uses her perspective and way of thinking as a category theorist in real life to understand deep connections between human interactions. This has lead her to publish four books on topics ranging from feminism to teaching maths with cooking.

Read more on [her webpage](#), in [this interview](#), or watch this [public lecture on YouTube](#).

## 55 Nergis Mavalvala

### General Relativity; Data Analysis

Keywords: Women, Queer, Pakistani

Nergis Mavalvala (1968-) is a Pakistani physicist known for her leading work in the discovery of gravitational waves. Her Ph.D. work solved the problem of how to precisely align mirrors less than a metre wide separated by four kilometres, and this method is implemented today in LIGO to detect gravitational waves. She began working in the field well before most people had heard of gravitational waves, and her work has been an integral part of an international collaboration of thousands of scientists.



In 2014, Mavalvala and her group were working on the quantum technologies being implemented in the Advanced LIGO system. When the new system came online, the group needed to validate the data analysis techniques of the new system by feeding fake signals into the data stream and seeing if these signals were detected. This was important, because the project was able to detect gravitational waves which produced very strong signals compared to the signals from background noise with high statistical significance.

Mavalvala was a recipient of the MacArthur genius award in 2010, was named LGBTQ Scientist of the year in 2014, and in recent years she was appointed Dean of the School of Sciences at MIT. She is also renowned for her advocacy in challenging racial and social injustices in STEM.

See more in [this summary](#) or in [this interview](#).



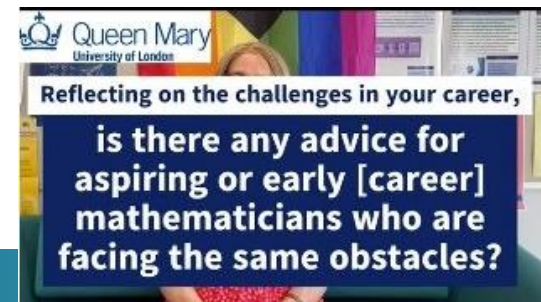
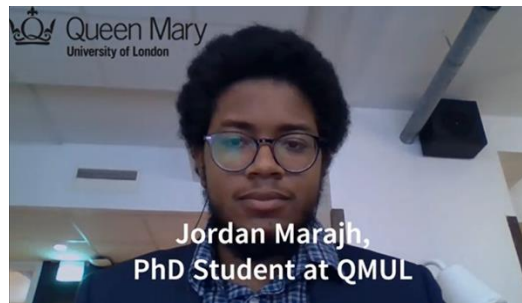
# Historical contributions of different cultures to mathematics

- The Pythagorean Theorem
- Irrational numbers
- A mathematical history of Probability
- Algorithms for solving algebraic equations
- More to come!
- 26/27 History of Mathematics (Y3 module)



# Interviews

- Bridge the gap between students and mathematicians.
1. QMUL PhD students
  2. QMUL academic staff
  3. External academics
  4. Mathematicians in industry or other jobs



# A Mathematician Like Me

Our 'A Mathematician Like Me' series aims to inspire future mathematicians by highlighting a range of individuals working or studying in mathematical fields.

Members of our EDI team spoke with mathematicians from a range of backgrounds to learn about their journeys in mathematics.


Click the links below to explore individual stories and inspirations.



**Prof Anotida Madzvamuse**

Professor of Mathematics at the University of British Columbia


→



**Dr Asuka Kumon**


Lecturer in Pure Mathematics Education at Kings College London


→



**Professor Bethany Marsh**

Professor of Mathematics at the University of Leeds

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Qr code



Link

<https://www.qmul.ac.uk/maths/our-community/equality-diversity-and-inclusion/a-mathematician-like-me/>

# DiverS&E

We are proud of the diversity of our community of academics, post docs, students and support staff and the work they are doing to deliver outstanding research.

These pages showcase and celebrate some of these people and link to the Awareness and Inclusion Calendar.



Katy Clough

Senior Lecturer in the Centre for Geometry Analysis and Gravitation working on numerical relativity



Kymani Armstrong-Williams

Royal Society Career Development Fellow in the Centre for Theoretical Physics



Hazel Screen

Professor in Bioengineering co-directing the Centre for Predictive in vitro models



Atanas Tomov

Chemist and Technical Facilities Manager in the School of Physical and Chemical Sciences



Rory Bennett

Bioengineering PhD student working on prostate ultrasound imaging and sensing



Karin Hing

Professor of Biomaterials and Tissue Regeneration

# Questions?

