

First Female Fields Medalist – Maryam Mirzakhani



https://commons.wikimedia.org/wiki/File:Maryam_Mirzakhani_in_Seoul_2014.jpg

Maryam Mirzakhani was an Iranian mathematician (born on May 12, 1977) and a mathematics professor at Stanford University. She earned a Ph.D. from Harvard in 2004. She was the first female mathematician to be awarded the very prestigious Fields Medal. In fact, the Fields Medal is the most prestigious award in mathematics, equivalent to a Nobel Prize (mathematics is specifically excluded from the Nobel prize). Awardees must be younger than 40 when they did the work for which they are receiving the award. Dr. Mirzakhani won the Fields Medal in 2014. Unfortunately she passed away in 2017 from breast cancer at the age of 40.

Required Reading

- **Maryam Mirzakhani**, <https://mathshistory.st-andrews.ac.uk/Biographies/Mirzakhani/>
- **Maryam Mirzakhani**, https://en.wikipedia.org/wiki/Maryam_Mirzakhani
- **First female to win math's top prize describes her 2 brainstorming strategies -** <https://venturebeat.com/2014/08/13/first-female-to-win-maths-top-prize-describes-her-2-brainstorming-strategies/> (includes a great picture showing her at work in addition to describing her strategies and hopes to encourage young female mathematicians)

Optional Viewing and Reading

- http://www.ams.org/journals/notices/201810/rnoti-p1221.pdf?utm_source=Informz&utm_medium=email&utm_campaign=H%26D-10%2F17%2F18&_zs=fN1BH1&_zl=xPki4 – AMS Notices article on her life and mathematics with reflections by people who knew her
- <https://youtu.be/HUBnzTTQ5jk> - Memorial for Maryam Mirzakhani, held at Harvard University on Aug. 13, 2017. Although long (1:35:34), this video is full of interesting information about her and her mathematical contributions from a variety of people who knew her (classmates, professors, ...).
- <https://www.youtube.com/embed/VC7MZv1JH8w> - ICM2014 Curtis McMullen, Laudation for Fields Medalist: Maryam Mirzakhani
- <https://legacy-www.math.harvard.edu/history/mirzakhani/index.html> - has links to other sites and a video of Prof. Mirzakhani giving a lecture in 2015