



# DEPARTMENT OF MATHEMATICS , VTM NSS COLLEGE

11/02/2022

## WOMEN IN MATH WORLD



The Department of Mathematics started functioning since the inception of college in 1964. Since then the Department regularly conducts curricular and co-curricular activities, which empowers our student community.

In the academic year 2021-22, we celebrate International Women and Girls in Science Day on 11th February by releasing a Newsletter, "**WOMEN IN MATH WORLD**"

*International Women and Girls in Science Day*



# International Women and Girls in Science Day 2022

Science and Gender equality are both vital for the achievement of the Internationally agreed development goals, including the 2030 Agenda of Sustainable Development. Over the past decades, the Global Community has made a lot of efforts in inspiring and engaging women and girls in science. Yet women and girls continue to be excluded from participating fully in science. In order to achieve full and equal access to and participation in science for women and girls, and further achieve gender equality and the empowerment of women and girls, the United Nations General Assembly declared 11 February as the International Day of women and girls in science in 2015.

Recognizing the role of women and girls in science, not only as beneficiaries, but also as agents of change, including in view of accelerating progress towards the achievement of SDG6 (Clean water and sanitation), the 7th International Day of women and girls in Science assembly focus on the topic "Equity, Diversity and Inclusion: Water Unites Us"

## WOMEN MATHEMATICIANS



**Shakuntala Devi**

was an Indian mathematician, writer and mental calculator, popularly known as the "Human Computer". Her talent earned her a place in the 1982 edition of The Guinness Book of World Records.

**Nalini Florence Anantharaman was born in Paris in 1976 to two mathematicians. Her father and her mother are Professors at the University of Orléans. In 2012 she won the Henri Poincaré Prize for mathematical physics**



**KAREN KESKULLA UHLENBECK**

Born August 24, 1942 is an American mathematician and one of the founders of modern geometric analysis. She is a professor emeritus of mathematics at the University of Texas at Austin, where she held the Sid W. Richardson Foundation Regents Chair. In March 2019, Uhlenbeck became the first woman to receive the *Abel Prize*, with the award committee citing the decision for her pioneering achievements in geometric partial differential equations, gauge theory and integrable systems, and for the fundamental impact of her work on analysis, geometry and mathematical physics.



# Maryam Mirzakhani

Iranian-born Maryam Mirzakhani was one of the greatest mathematicians of her generation. She was the first woman, and first Iranian, to be awarded a **Fields Medal** (also known as the International Medal for Outstanding Discoveries in Mathematics) for "her outstanding contributions to the dynamics and geometry of Riemann surfaces and their moduli spaces".



**Vanaja Iyengar** was an Indian mathematician, educationist and the founder vice-chancellor of Sri Padmavati Mahila Visvavidyalayam, Tirupati, in the south Indian state of Andhra Pradesh. She was one of the founders of the Andhra Mahila Sabha School of Informatics.

**Mary Cartwright** was a British mathematician and a woman of many firsts! She was not only the first woman to obtain a first in her university degree, but also one of the first mathematicians to study what is now known as chaos theory. She was the first woman to receive the Sylvester Medal



Russian mathematician **Sofia Kovalevskaya** made monumental contributions to analysis, partial differential equations and mechanics. She was a pioneer and icon for females in mathematics and STEM subjects everywhere.

The first woman to obtain a doctorate in mathematics, she went on to gain global recognition in the mathematical community due to her paper on partial differential equations and was awarded the Prix Bordin from the French Academy of Sciences, a prize given to the best solution of a specific mathematical problem.

**Gifted African-American mathematician and educator Marjorie Lee Browne** was the first black woman to gain a doctorate in maths. "If I had to live my life again, I wouldn't do anything else. I love mathematics."



**Marie-Sophie Germain** was a French mathematician and physicist who, despite opposition from society (and her parents) due to her sex, persevered and went on to greatly contribute to maths. She worked on it independently throughout her life and through her hard work, she not only advanced the field of number theory, but was also one of the pioneers of elasticity theory, becoming the first woman to win the grand prize from the Paris Academy of Sciences for her essay on the subject.





**Mangala Narlikar:** A bigwig in the field of mathematics, her interests in the subject range from real and complex analysis, analytic geometry, number theory to algebra and topology. she has contributed immensely to generating interest among laypeople in the subject. Not only did she go on to write books but also made concrete changes to the way textbooks are published.

Television presenter **Rachel Riley** studied Mathematics at Oxford University. At age 22 she joined Countdown where she applies her maths skills on a regular basis, handling the letters and numbers rounds to find solutions to complicated problems.



**Neena Gupta** (born in 1984) is a professor at the Statistics and Mathematics Unit of the Indian Statistical Institute (ISI), Kolkata. [1] Her primary fields of interest are commutative algebra and affine algebraic geometry. She has won [2] Shanti Swarup Bhatnagar award (2019) in the category of mathematical sciences, the highest honour in India in the field of science and technology. He is also the recipient of Abdus Salam ICTP's Ramanujan Prize for Young Mathematicians from Developing Countries in 2021.

American actress **Mayim Bialik** studied neuroscience at UCLA, where she went on to obtain a Ph.D in 2007. She is best known for her role as Dr. Amy Fowler in the comedy The Big Bang Theory, but has starred in countless other television shows and films.



**Parimala Raman:** She is known globally for her contribution in the field of algebra and is a recipient of multiple national and international awards, including the Shanti Swarup Bhatnagar Prize for Science and Technology (1987). Well-recognised for her solution to the second Serre conjecture, Parimala's area of research includes algebra with connections to algebraic geometry and number theory. In 2010, she received one of the highest global honours in mathematics when she was chosen as the plenary speaker at the International Congress of Mathematicians.

**Malala Yousafzai** is a Pakistani activist for female educational rights, and the youngest person to win the Nobel Peace Prize, at just age 17! She took A-Level Mathematics and is currently studying Philosophy, Politics and Economics (PPE) at Oxford University. She has won many awards and has been named one of Time Magazine's "100 Most Influential People in the World"



*Thank you!*