

# Vigyan Vidushi 2023

## Mathematics



Mythily Ramaswamy is an Indian mathematician and professor in the Department of Mathematics at the Centre for Applicable Mathematics of the Tata Institute of Fundamental Research in Bangalore. She was elected to the Indian Academy of Sciences in 2007 and the winner of the Kalpana Chawla Award of the Karnataka State Council for Science and Technology, given to young woman scientists for achievements in the field of science and technology. She was also awarded the prestigious P.C. Mahalanobis Medal of the Indian National Science Academy (INSA) in 2021. This medal is a lifetime achievement award given in recognition of her many contributions to mathematics.

Professor Mythily Ramaswamy's research involves partial differential equations, nonlinear functional analysis and control problems.

### **A glimpse into Fourier – PDE connection**

In early 19th century, Fourier's attempt to understand heat conduction led him to a PDE and its solution method, now known as Fourier Series. We briefly retrace this history and then indicate the later developments of Fourier analysis and some applications to PDE.

**10 July 2023 at 2:00 pm (AG-66)**