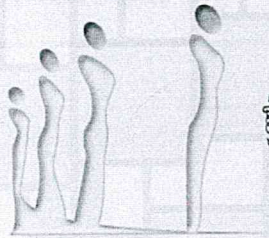
The Institute of Mathematical Sciences celebrates

International Day of Girls and Women in Science 2019



The Institute of Mathematical Sciences
Monday, 11th February 2019
09:30 - 18:00

The event is open to students (5 girls per school) from classes 8th - 10th

Schools can register online through this website:
`https://www.imsc.res.in/outreach/IDGWS2019/`

Registration deadline: **7th February** (or until we reach capacity)
Selection notification: 8th February
The program is free. Lunch and snacks will be provided.
IMSc is unable to provide any assistance towards travel/accommodation.

The Institute of Mathematical Sciences, IV Cross Road, CIT Campus, Taramani, Chennai – 600113.
For IMSc outreach activities visit: `https://www.imsc.res.in/outreach/`

This background is a non edge-to-edge tiling with squares of 3 different sizes, such that each congruent square has an identical neighbourhood. Are there other ways to arrange the tiles with the same property? Are there other sizes of 3 square tiles that can be arranged similarly?

Doris Schattschneider, is a mathematicia who studied these and other tilings to make significant contributions to the field of mathematics.

International Day of Girls and Women in Science 2019 Schedule

	11th February 2019
09:00 - 09:30	*Registration*
09:30 - 10:30	**Let there be light!** Shanti Bhattacharya, IITM We have come a long way from our ancestors who first learnt to tame fire both for its heat, as well as its light. The sun and fire are no longer the only sources of light and illumination is no longer its only use. Today, we engineer many different kinds of sources for a variety of applications, ranging from life-saving medical devices to technology, whose sole aim is to entertain us! In this presentation, we will look at total internal reflection and interference, and study their role in a variety of everyday applications and phenomena.
10:30 - 11:00	*Tea / Juice / Snacks*
11:00 - 12:00	**Popular matchings** Prajakta Nimbhorkar, CMI We want to allocate students to hostel rooms where each student likes some rooms more than the rest. If each student submits a list of rooms according to his/her liking, how do we allocate the rooms? Popular matchings gives us one such way.
12:00 - 13:00	**Using computers to probe material properties** Satyavani Vemparala, IMSc Vani will explain how large scale computation can be used to probe material properties in accessible to experiments. In particular, she will focus on polymers and water.
13:00 - 14:00	*Lunch*
14:00 - 15:00	**Demonstrations and Activites** *IMSc members*
15:00 - 15:30	*Tea / Juice / Snacks*
15:30 - 16:00	**Hidden figures of Indian Science** Nandita Jayaraj, TLoS A science journalist gives you the breaking news. An interactive session to WOW you with some some of the coolest things Indian scientists are doing in their laboratories today.
16:00 - 18:00	**Moulik Berkana, American Counsulate, Chennai** Movie: **Hidden Figures (2016)** The story of a team of female African-American mathematicians who served a vital role in NASA during the early years of the U.S. space program.
18:00 - 18:30	*Snacks*

INDIAN WOMEN IN SCIENCE

Shraddha Nayak for TLoS

UMA RAMAKRISHNAN

Uma is a conservationist who tracks the populations and survival of tigers. She is known for estimating the genetic diversity and numbers of tigers in our national parks.

THE INSTITUTE OF MATHEMATICAL SCIENCES

THE LIFE OF SCIENCE.com

FEBRUARY 2018

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INDIAN WOMEN IN SCIENCE

TLoS

D INDUMATHI

Indumathi is a particle physicist who studies neutrinos, the most abundant particles in the universe. She is making important contributions towards India's vision to house its very own neutrino observatory (INO).

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MARCH 2018

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INDIAN WOMEN IN SCIENCE

Cyrus Khan for TLoS

SANDHYA KOUSHIKA

Sandhya is a neurobiologist who uses roundworms (*C. elegans*) to study how transport of material in nerve cells is aided by molecular motors.

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APRIL 2018

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INDIAN WOMEN IN SCIENCE

TLoS

KANEENIKA SINHA

Kaneenika is a mathematician working in the area of analytic number theory and arithmetic geometry. She is also an active math communicator and popular blogger.

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MAY 2018

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INDIAN WOMEN IN SCIENCE

Narayan Kumar

RANI SIROMONEY

Rani is a theoretical computer scientist with five decades of experience in the field of formal languages and automata theory. She spent most of her professional life in Madras Christian College, Chennai.

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JUNE 2018

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INDIAN WOMEN IN SCIENCE

Tlos

NANDINI CHATTERJEE SINGH

Nandini is a cognitive neuroscientist who studies what goes on in the human brain especially in association with music, multilingualism, autism and learning disorders.

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JULY 2018

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INDIAN WOMEN IN SCIENCE

Infosys Science Foundation

GAGANDEEP KANG

Gagandeep is world-renowned for her research on rotavirus, a virus that contributes to a large proportion of India's infant mortality arising from childhood diarrhoea. She is currently involved in the development of vaccines and in health policy.

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AUGUST 2018

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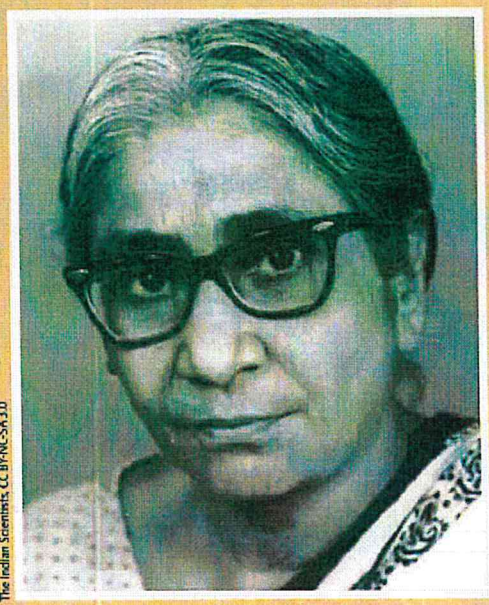
INDIAN WOMEN IN SCIENCE



The Indian Scientists, CC BY-NC-SA 3.0

ASIMA CHATTERJEE (1917-2006)

Asima discovered several plant-based medicines with anti-malarial, anti-epileptic and anti-cancer properties. Last year, a Google Doodle celebrated her 100th birth anniversary.

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SEPTEMBER 2018

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INDIAN WOMEN IN SCIENCE

Abel Foundation/Sujatha Ramdorai

SUJATHA RAMDORAI

Sujatha is a mathematician famous for her work on the Iwasawa theory. She is also an educator with a passion for making quality math education accessible to all.

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OCTOBER 2018

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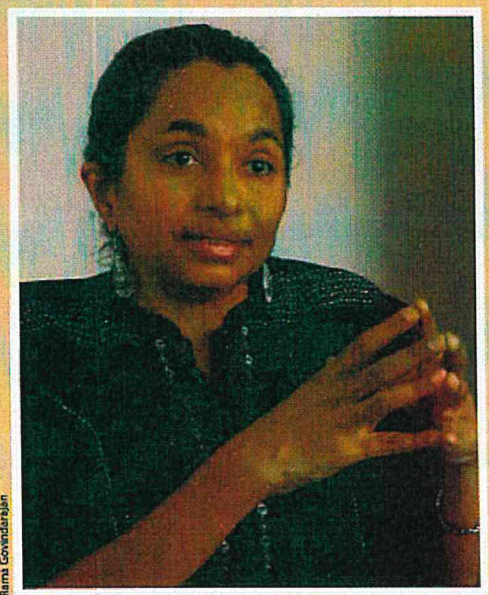
INDIAN WOMEN IN SCIENCE



Rama Govindarajan

RAMA GOVINDARAJAN

Rama is a physicist-engineer in the field of fluid mechanics. She is using her skills to model a very unique phenomenon that directly affects more than a billion people—the Indian monsoon.

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INDIAN WOMEN IN SCIENCE

John Innes Archives/Wikimedia Commons

JANAKI AMMAL (1897-1984)

Janaki Ammal, a world-renowned botanist and cytogeneticist, was one of the first women scientists of modern India. She is famous for her contributions to the Botanical Survey of India and for creating hybrid varieties of sugarcane and brinjal.

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INDIAN WOMEN IN SCIENCE

Infosys Science Foundation

SANGHAMITRA BANDYOPADHYAY

Sanghamitra is a computer scientist whose algorithms are useful to scientists across disciplines, especially to those dealing with large data sets.

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JANUARY 2019

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INDIAN WOMEN IN SCIENCE

Rahul M for TLoS

KRISHNAVENI V GHATTU

Krishnaveni is an epidemiologist who studies the effect of stress on young adults and early origins of adult non-communicable diseases.

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FEBRUARY 2019

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