

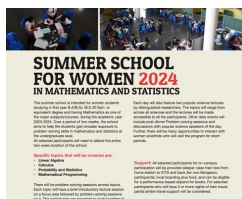


## PROGRAMS

Programs bring together researchers from India and around the world to collaborate on cutting-edge topics of research.

They contribute to transforming the way people do research and help incubate new and emerging areas. They explore new directions in science and provide a platform for theory to come face to face experiment.

Many ICTS programs are pedagogical schools for students and postdocs where lectures are delivered by international experts. All the lectures are archived on the ICTS YouTube Channel 'ICTStalks'.



## International collaborations

- 'ICTP-ICTS Biology Program': a school that alternates between ICTS (Bengaluru) and ICTP (Trieste);
- The 'Kavli Asian Winter School in Strings, Particles and Cosmology', that rotates between China, India, Japan and Korea;
- The NSF supported ICTS-Brandeis meetings on statistical physics;
- The five Max Planck Partner groups at ICTS;
- Templeton, CEFIPRA, IFCAM grant;
- APS Satellite meeting

## RESEARCH

Research at ICTS is organized as a union of families of researchers that includes faculty, students, postdocs and visiting scientists. Our top-notch faculty is engaged in high quality research in theoretical physics, mathematics and computer science.

### Research groups

#### Condensed Matter and Statistical Physics

Subroto Bhattacharjee, Chandan Dasgupta, Abhishek Dhar, Deepak Dhar, Manas Kulkarni, Anupam Kundu, Hulikal R. Krishnamurthy, Sumathi Rao, Sthitadhi Roy

#### Biological Physics

Brato Chakrabarti, Akshit Goyal, Vijay Kumar Krishnamurthy, Sriram Ramaswamy, Shashi Thutupalli

#### Fluid Dynamics and Turbulence

Amit Apte, Pallavi Bhat, Brato Chakrabarti, Rama Govindarajan, Samridhi Sankar Ray, Debasis Sengupta, Jim Thomas, Vishal Vasan

#### String Theory and Quantum Gravity

Rajesh Gopakumar, Raghu Mahajan, Loganayagam R., Suvrat Raju, Ashoke Sen, Spenta R. Wadia

#### Astrophysics and Relativity

P. Ajith, Pallavi Bhat, Bala Iyer, Prayush Kumar, Rajaram Nityananda, Joseph Samuel

#### Applied and Computational Mathematics

Amit Apte, Mythily Ramaswamy, Jim Thomas, Vishal Vasan

#### Computer Science

Jaikumar Radhakrishnan

#### Geometry and Physical Mathematics

Rukmini Dey, Pranav Pandit, TN Venkataramana

#### Probability Theory

Siva Athreya, Anirban Basak, Riddhipratim Basu

## OUTREACH

- Engages students, and civic society on issues of modern science.
- Institutional collaborations (e.g. with the J.N. Tata Planetarium) facilitate these activities.
- Training teachers on conveying science and maths concepts in an effective way.
- Various activities in schools.
- Promise in Science and Mathematics (PRISM)

### Activities

Public Lectures, Kaapi with Kuriosity, Vigyan Adda

Einstein Lectures, Vishveshwara Lectures, Madhava Lectures, and D.D. Kosambi Lectures

Mathematics Circle India, MathSpark, ICTS-RRRI Maths Circle

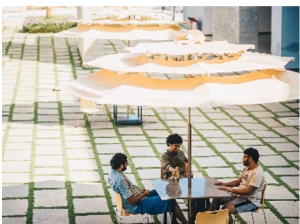
A virtual exhibition named CosmicZoom





## CAMPUS

The ICTS campus located in Bengaluru is a world-class residential campus, designed to provide office space and on-site accommodation for more than 150 academic members, including 75 visitors.



Turing Computing Centre



Panini Library



State of the art guesthouse



Recreational facilities



Asia Oceania Women in Mathematics



INTERNATIONAL  
CENTRE *for*  
THEORETICAL  
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Web: [www.icts.res.in](http://www.icts.res.in); Ph: 080-46536000



The International Centre for Theoretical Sciences (ICTS) of the Tata Institute of Fundamental Research in Bengaluru is a multi and interdisciplinary centre with 3 main goals:

### PROGRAMS

Bring together physicists, astronomers, cosmologists, mathematicians, biologists, students and researchers from all over the world, under one roof, to work together to solve the most challenging questions posed by nature, to discover the underlying structures across the sciences and to strive for the unity of knowledge;

### RESEARCH

In-house research - by highest quality faculty in the theoretical sciences;

### OUTREACH

Stimulate and harness the young minds of India and connect with members of the public who are interested in the latest developments of scientific research.