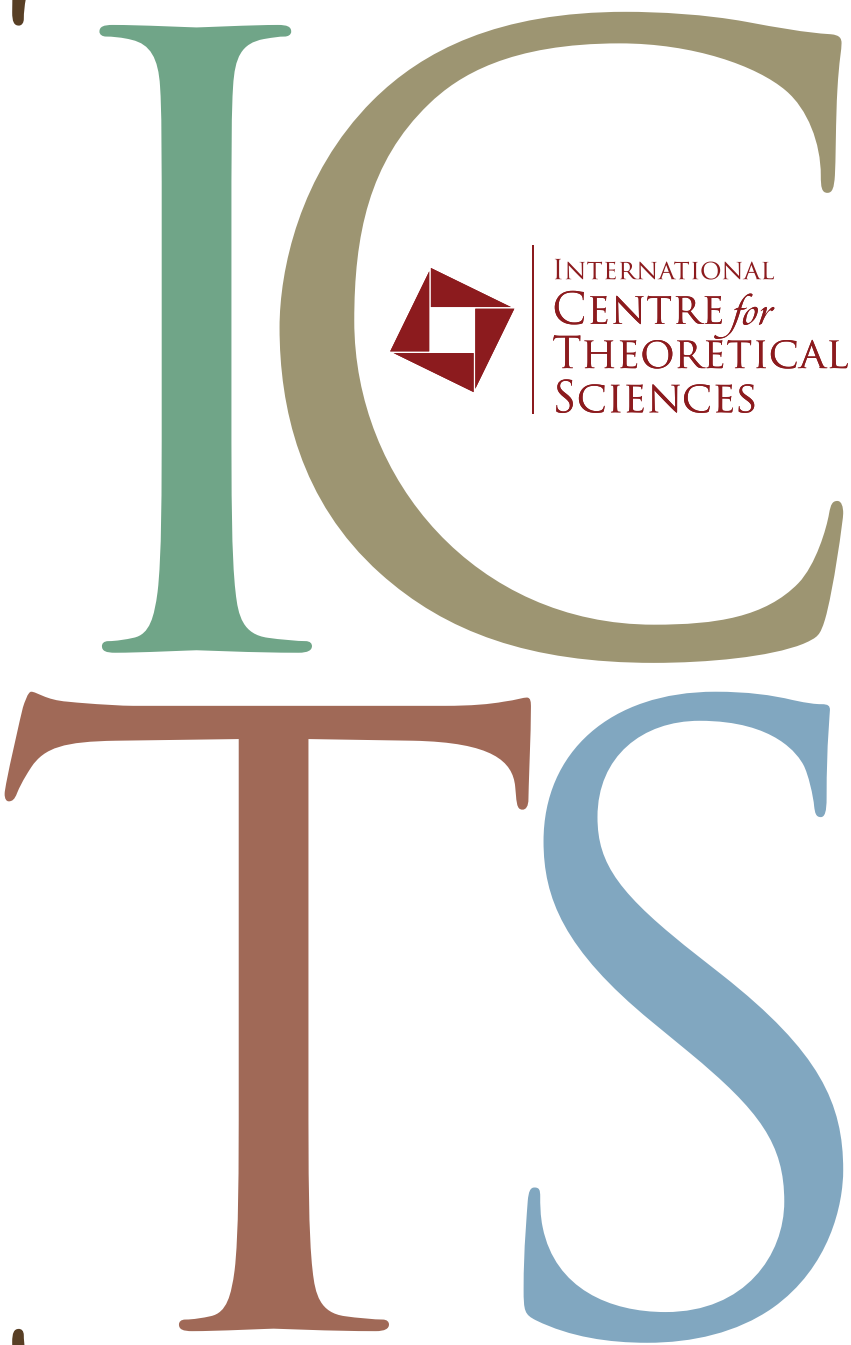


INTERNATIONAL CENTRE *for* THEORETICAL SCIENCES

We live in a world in which science, from mathematics through to biology and computer science, affects us all. By encouraging the full development of science across disciplines we help to shape the future.

–Michael Atiyah,
University of Edinburgh

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

CONTENTS

ICTS has already significantly surpassed my expectations as a theory centre. I was impressed by its intellectual vigour and the aura of excitement, even before it had its own campus, when I spent a week at ICTS in 2013. Now with its new campus coming up, I expect great things to be happening at ICTS. I am particularly looking forward to active interactions among theorists from different disciplines which should lead to novel ideas not possible otherwise.
–Sankar Das Sarma,
University of Maryland

Brochure Editorial Team: Ananya Dasgupta and Rubina Shaikh
Design: Anisha Heble

FROM THE DIRECTOR'S DESK

In the last seven years, ICTS, a centre of the Tata Institute of Fundamental Research in Bangalore, has grown from a fledgling institution to a global centre of activity in various areas of science.

As past experience has shown, major breakthroughs in science occur when problems are seen in a different light; and at times when different core disciplines are brought to bear on a given problem. Currently there is an enormous amount of work going on at the interface of physics, chemistry, biology, mathematics and computer science in different combinations.

Hence at ICTS science is a mélange of creative ideas from classical and modern disciplines, while emphasizing the need to remain strong in traditional areas. This is realised by establishing in-house research areas and collaborative visitor driven programmes.

The in-house research areas at the Centre are growing in disciplines like statistical physics and complex systems, gravitational wave astronomy and numerical relativity, non-linear dynamics and data assimilation, quantum field theory, string theory and quantum gravity, and cross-disciplinary biology. We have succeeded in attracting some of the best available young talent in these areas: they include P. Ajith, Amit Apte, Pallab Basu, Subhro Bhattacharjee, Rukmini Dey, Abhishek Dhar, Avinash Dhar, Rajesh Gopakumar, Vijay Kumar Krishnamurthy, Anupam Kundu, Samriddhi Ray and Suvrat Raju in Faculty positions.

ICTS has a vigorous Ph.D. students' program. The students are stationed in Bangalore and their course requirements for a degree from TIFR are partly fulfilled by arrangements with various institutions in Bangalore. A strong post-doctoral program has also been initiated.

The visitor-driven activities are centered on organization of programs, which is an essential component of the mandate of ICTS. Many of the programs include workshops and discussion meetings. The primary goal here is to provide the platform and resources for researchers to congregate over extended periods of time. ICTS encourages cross-disciplinary collaborations and interactions between theorists and experimentalists, and fosters research areas of importance to India.

Another central activity of ICTS is Outreach, a crucial component of which consists of organizing Public Lectures by outstanding scientists. Besides its regular scientific activities, ICTS provides a platform for new science initiatives in India. Thus, it is working closely with LIGO-India and the LIGO scientific collaboration that proposes to install a gravity wave detector in India that can form a component of long baseline worldwide linked gravity wave detectors. ICTS has also initiated the Indian Open Light path Exchange Facility at Bangalore (IndiaLight) for the Data Intensive Sciences.

Some of ICTS' activities are supported by international grants from two foundations. One is the AIRBUS Corporate Foundation grant for an international teaching and research chair entitled 'Mathematics

of Complex Systems' and the other is the 'Targeted Grants to Institutes' from the Simons Foundation, USA.

While ICTS has already become a vibrant centre of activity in its distributed existence, the construction work of its own spacious campus is also nearly complete. The firm of Venkatramanan and Associates from Bangalore has created the architectural plan of the ICTS campus, in close consultation with the academic members of ICTS and the project management group from the Department of Atomic Energy. The campus is self-contained and includes academic housing and recreational facilities. There is attention given to provide space for maximum academic interactions. It contains lecture halls with enough capacity for meetings with hundred plus participants, an auditorium, recreation spaces and comfortable living quarters for staff and visitors.

At present, ICTS is located on the campus of the Indian Institute of Science, under the 'ICTS-IISc Joint Program', which is a formal agreement between IISc and TIFR.

It has only been a short seven years since the idea of ICTS began taking a concrete shape. We have traveled a long way since then. The path has not been smooth, often not visible. But then as the Spanish poet Antonio Machado said, "Traveller, there is no road, the road is made by walking."

–Spenta R. Wadia
Director

VISION

Science without Boundaries

ICTS-TIFR aims to expand the boundaries of scientific understanding. With a core faculty of high excellence, it hopes to build a world-class facility that will augment research and provide the stepping stone to unravelling some of the most significant and challenging scientific problems of our times. Through regular interactive programs, it also aims to promote collaboration and positively impact the overall atmosphere of research and education in India.

ICTS is a multi and interdisciplinary venture that brings together various subjects such as mathematics, physics, biology, computer science and earth sciences. It is envisaged as a place where high level research is done and scientists from around the world meet and interact for critical periods of time in a relaxed and collaborative atmosphere.

ICTS endeavours to develop into a hub of scientific activities in the Indian subcontinent, a centre for world class research. It hopes to attract the best scientists worldwide to organize and participate in programs that stimulate progress in science. It also plans to organize outreach activities that share the excitement of discovery and contribute to the growth and spread of the basic sciences in India and the world at large.

The activities at ICTS fall under the following three broad categories with a significant overlap of the first two: i) Programs ii) Research iii) Outreach and public engagement.

ICTS is shaping up nicely as a great interdisciplinary Institute that was really lacking in India. It has already made its mark internationally by organizing high-quality conferences, workshops, summer schools and also by hiring a group of talented young researchers across disciplines. I wish a great future for this young and upcoming Institute.
–Satya Majumdar, LPTMS France

RESEARCH

The Centre is envisaged to have a high quality permanent faculty of modest size together with a large floating population comprising visitors, postdoctoral fellows and graduate students. The faculty members work in various areas of theoretical sciences. They carry out cutting-edge research, provide intellectual leadership and nurture a rich scientific culture. Their eminence attracts the brightest students and postdoctoral researchers as well as outstanding organizers and participants for the Centre's programs. ICTS also has a wide group of Associated Faculty, who are deeply involved in various activities of the Centre.

The in-house research is organized as a union of families of researchers. The scientific questions that drive the current ICTS faculty research are from the broad areas of Astrophysical Relativity, Data Assimilation and Dynamical Systems, Condensed matter and Statistical Physics, Physical Biology and String Theory. There is a dedicated effort to establish a unit in Interdisciplinary/ Exploratory mathematics.

ASTROPHYSICAL RELATIVITY

This group pursues astrophysical applications of the general theory of relativity. In particular, the group is interested in different aspects of gravitational-wave physics and astronomy, including the modeling of the astrophysical sources of gravitational waves using analytical and numerical relativity, astrophysical tests of theories of gravity, relativistic astrophysics, cosmology, high-performance computing, etc. The group is actively involved in the LIGO Scientific Collaboration and the Indian Initiative for Gravitational-Wave, which spearheads the proposal for the LIGO-India project.

ICTS faculty	**Parameswaran Ajith**
PhD	*Max Planck Institute-Hannover*
Postdoc	*Caltech Astrophysics and LIGO*
Postdocs	Archisman Ghosh, Nathan Johnson-McDaniel, Chandrakant Mishra, Arunava Mukherjee
Associate faculty	Bala Iyer (*Visiting Professor),* Tarun Souradeep (*IUCAA-Pune),* Rana Adhikari (*Caltech-USA),* K. G. Arun (*Chennai Mathematical Institute-Chennai),* Sascha Husa (*Universitat de les Illes Balears-Spain),* Mark Hannam (*Cardiff University-UK),* Badri Krishnan (*Max Planck Institute-Hannover)*

DATA ASSIMILATION AND DYNAMICAL SYSTEMS

This group pursues applications of techniques from dynamical systems, statistics, and probability to study physical problems, particularly those related to earth sciences and plasma physics, and the interplay between physical, mathematical, and statistical ideas in such applications. Relations with the emerging questions from high dimensional/big data sciences are being explored as well.

ICTS faculty	**Amit Apte**
PhD	*University of Texas, Austin*
Postdoc	*University of North Carolina,* *previously faculty at TIFR - Centre for Applicable Mathematics (CAM)*
Post-docs	Karthik Gurumoorthy, Sk. Sarif Hassan
Associate faculty	Ravi Nanjundiah (*IISc-Bangalore)*, Mythily Ramaswamy and Sreekar Vadlamani (*TIFR-CAM)*

Statistical Physics, Turbulence, Condensed Matter and Physical Biology

This group pursues theory and applications of non-equilibrium statistical mechanics to a variety of systems including biological systems. Some of the areas of interest are understanding heat transport in low-dimensional systems, non-equilibrium fluctuation theorems, turbulence, mechano-biological pattern formation in morphogenesis, frustrated magnetism, and topological insulators.

ICTS faculty	**Abhishek Dhar** | Statistical physics
PhD	*Tata Institute of Fundamental Research, Mumbai*
Postdoc	*IISc-Bangalore, previously faculty at Raman Research Institute-Bangalore)*
	Anupam Kundu | Statistical physics *(From May 2015)*
PhD	*Raman Research Institute, Bangalore*
Postdoc	*LPTMS Orsay and Weizmann Institute*
	Samriddhi Sankar Ray | Fluids and Turbulence
PhD	*IISc Bangalore*
Postdoc	*Laboratoire Cassiopée, Observatoire de la Côte d'Azur, CNRS, Nice, France*
	Subhro Bhattacharjee | Condensed Matter Physics *(From May 2015)*
PhD	*IISc Bangalore*
Postdoc	*University of Toronto and MPI-Dresden*
	Vijay Kumar Krishnamurthy | Physical biology
PhD	*IISc Bangalore*
Postdoc	*Yale and MPI-Dresden*
Postdocs	Divya Venkataraman, Abhiram Soori
Associate faculty	Nivedita Deo *(University of Delhi)*, Kavita Jain (*JNCASR-Bangalore)*, Satya Majumdar *(LPTMS France)*, Sanjib Sabhapandit *(RRI-Bangalore)*; Kedar Damle *(TIFR-Mumbai)*, Sumathi Rao *(HRI)*, Krishnendu Sengupta *(Bose Institute, Kolkata),* Diptiman Sen *(IISc-Bangalore)*; Siddhartha Goyal *(Univ of Toronto),* Sanjay Jain *(Univ of Delhi)*, Sandeep Krishna *(NCBS)* Madan Rao *(RRI)*, Anirvan Sengupta *(Rutgers)*, Mukund Thattai *(NCBS)*

In just a few years, ICTS seems to have had tremendous impact on Indian science. The ICTS school/program in my own research area attracts not only top international scientists but also some highly motivated and talented students. The ICTS discussion meetings are a novel alternate to the traditional conference format. I attended a cross-disciplinary discussion meeting a few years back which was one of the most stimulating and useful meetings in that area I have been to anywhere in the world.
–T. Senthil,
Massachusetts Institute of Technology

String Theory, Cosmology, High Energy Physics

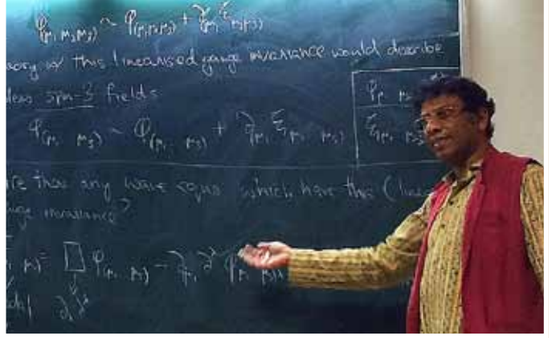
This group pursues various problems in black hole physics, the AdS/CFT correspondence and applications of this correspondence to some problems in condensed matter physics and cosmology, studies in Chern-Simons matter theories and higher spin theories, and beyond standard model physics.

ICTS Faculty	**Pallab Basu** | String Theory and Statistical Physics
PhD	*Tata Institute of Fundamental Research, Mumbai*
Postdoc	*University of British Columbia, Canada*
	Avinash Dhar | String Theory, HEP
PhD	*Tata Institute of Fundamental Research, Mumbai*
Postdoc	*SLAC, Stanford University* *Faculty at TIFR-Mumbai*
	Rajesh Gopakumar | Quantum Field Theory and String Theory *(From April 2015)*
PhD	*Princeton University*
Postdoc	*Harvard University* *Faculty HRI-Allahabad*
	Suvrat Raju, String Theory, Cosmology
PhD	*Harvard University*
Postdoc	*Harish-Chandra Research Institute, Allahabad*
	Spenta Wadia | Quantum Field Theory, String Theory, Quantum Gravity and Statistical Physics
PhD	*City University of New York, New York*
Postdoc	*University of Chicago* *Faculty at TIFR-Mumbai*
Postdocs	Prasant Samantray, Amin Nizami and Yuki Yokokura
Associate Faculty	Sayantani Bhattacharyya (*IIT-Kanpur),* Justin David and Aninda Sinha (*IISc-Bangalore),* Dileep Jatkar (*HRI-Allahabad),* Swapna Mahapatra (*Utkal University),* Shiraz Minwalla, Subhabrata Majumdar and Sandip Trivedi (*TIFR-Mumbai*), Biman Nath (*RRI-Bangalore),* Surjeet Rajendran (*UC Berkeley),* Tarun Sauradeep (*IUCAA-Pune),* Ravi Sheth (*UPenn-Philadelphia)*

INTERDISCIPLINARY MATHEMATICS

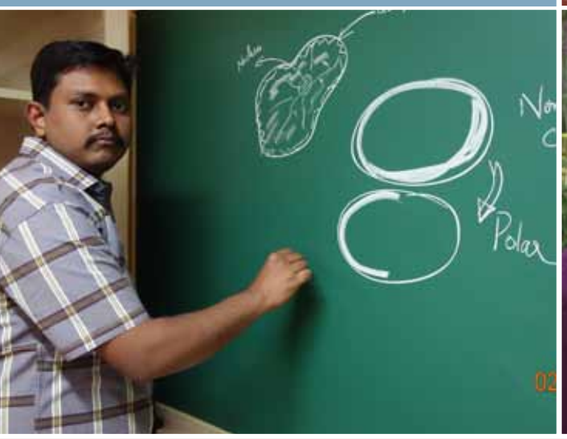
This group at ICTS is intended to be in areas of mathematics like probability theory, mathematical physics, computer science so that there are cross connections with other areas pursued at ICTS and also with visitors.

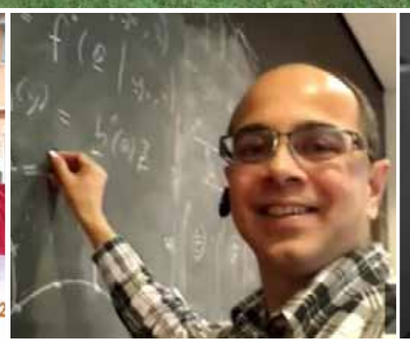
ICTS faculty	**Rukmini Dey** | Differential geometry and moduli spaces of well known equations of quantum field theory *(From April 2015)*
PhD	*SUNY Stony Brook*
Postdoc	*Univ of Austin* *Faculty HRI-Allahabad*
Associate Faculty	Shivani Agarwal *(IISC-Bangalore)*, Shravan Hanasoge *(TIFR-Mumbai)*, Sanjoy Mitter *(MIT)* and Nisheeth Vishnoi *(EPFL-Lausanne)*



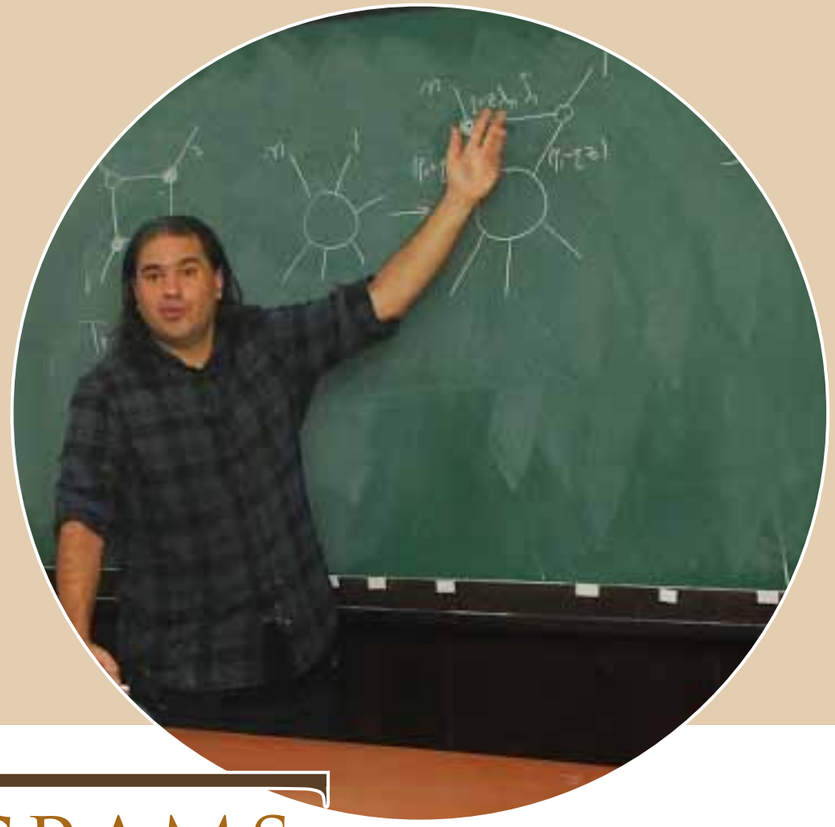
The ICTS is well-placed to play a leading role in theoretical physics, with a substantial international impact. In my own area of mathematical physics related to quantum fields and strings, many important contributions have been made by scientists working in India and I am sure that ICTS can play a major role in this field.
–Edward Witten,
Institute for Advanced Study, Princeton

I would describe ICTS with three words: Bold, Deliberate, Effective. Bold in its vision for its role in the Indian and international scientific community. Deliberate in its assessments of opportunity and in charting its path. Effective in supporting its faculty to achieve the full potential.
–Stan Whitcomb,
Caltech





ICTS is a unique institute which could serve as the major meeting point of scientists from India and outside India.
I wish ICTS great success in its mission.
–Ashoke Sen,
Harish-Chandra Research Institute, Allahabad



PROGRAMS

ICTS provides a platform for researchers working on diverse subjects to congregate during high-quality programs of varying durations. These highly interactive sessions endorse research areas that are especially contemporary, important and intellectually challenging. The programs contribute to transforming the way people approach research, venture into unexplored directions, nurture new frontiers of science and encourage collaborations. They also encourage the interaction between experimentalists and theorists.

ICTS ***long programs***, with an embedded conference, have a large educational component. They aim to provide an introduction to current problems in an emerging research area. There is a fair balance of international and national participation. The lecturers are carefully chosen and are often distinguished scientists. The participants are mainly graduate students, postdocs, and young faculty.

The ***short programs*** are focused discussion meetings on a recent exciting development in a given field. They are also often organized around a leading lecturer on a theme related to her/his work. These meetings usually include a research-oriented participation and are frequently organized in conjunction with one of the following three lecture series: ***Chandrasekhar*** (Physical Sciences), ***Ramanujan*** (Mathematics) and ***Turing*** (Biology, Computer Science and Engineering).

ICTS also organizes programs in collaboration with other international research institutes. Examples include the `ICTP-ICTS Biology Program' and the `Asian Winter School in Strings, Particles and Cosmology'.

A SAMPLE OF ICTS PROGRAMS

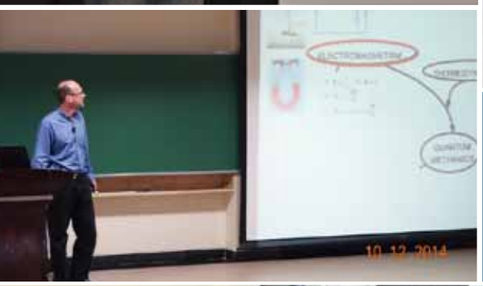
- **Correlated Electrons and Frustrated Magnetism** | Goa, November-December 2007
- **Quantum Information processing** | Mumbai, December 2007-January 2008
- **Cosmology with the Cosmic Microwave Background** | Pune, July-August, 2008
- **Monsoon Workshop on String Theory** | Mumbai, June-August, 2008
- **Graphical Models, Statistical Inference and Algorithms** | Mumbai, January, 2009
- **The 4th Asian Winter School on Strings, Particles and Cosmology** | Mahabaleshwar, January 2010
- **Breaking Barriers from Physics to Biology** | Bangalore, January, 2010
- **International School and Conference on Cold atoms and Ions** | Kolkata, January, 2010
- **Scientific Discovery through Intensive Data Exploration** | Bangalore, February 2011
- **Random Matrix Theory and Applications** | Bangalore, January-February 2012
- **Pan Asian Number Theory Workshop and Conference** | Pune, July 2012
- **Evolutionary Origins of Compartmentalized Cells** | Bangalore, February 2012
- **Unifying Concepts in Materials: JA Krumhansl School & Symposium** | Bangalore, January-February 2012
- **US-India Advanced Studies Institute on Thermalization: From Glasses to Black Holes** | Bangalore, June 2013
- **Numerical Relativity** | Bangalore, June-July 2013
- **NCBS-ICTS Monsoon School: Physics of Life** | Bangalore, June 2013
- **Strongly correlated systems: From models to materials** | Bangalore, January 2014.

ABDUS SALAM MEMORIAL LECTURE

- **Overview of Particle Physics after the Higgs Discovery** | ***Fernando Quevedo*** *(ICTP, Trieste)* | 10 December, 2013, IISc Bangalore
- **Complexity and Simplicity in Biological Systems** | ***Ramakrishna Ramaswamy*** *(University of Hyderabad)* | 21 November, 2014, IISc Bangalore





With the novel paradigms and problems being thrown up in large numbers on the interfaces of various disciplines because of the rapidly changing technological and scientific landscape, ICTS is an idea whose time has come.
Vivek Borkar,
Indian Institute of Technology, Mumbai


SUBRAHMANYAN CHANDRASEKHAR LECTURE SERIES (SINCE 2012)

- **Scattering Without Space Time** | ***Nima Arkani-Hamed*** *(IAS, Princeton)* | 25 September 2012, IISc Bangalore
- **Advances in Graphene, Majorana Fermions, Quantum Computation** | ***Sankar Das Sarma*** *(University of Maryland)* | 19 December 2012, IISc Bangalore
- **Strongly correlated systems: From models to materials** | ***Antoine Georges*** *(Professor of Collège de France and at Ecole Polytechnique)* | 10 January 2014, IISc Bangalore
- **New Dialogues: Entanglement, Holography and Renormalization** | ***Robert Myers*** *(Perimeter Institute for Theoretical Physics, Canada)* | 10 December 2014, IISc Bangalore
- **Quantum entanglement in macroscopic matter** | ***T. Senthil*** *(MIT)* | 13 January 2015, IISc Bangalore

SRINIVASA RAMANUJAN LECTURE SERIES (SINCE 2012)

- **The Generalized Ramanujan Conjectures and Applications** | ***Peter Sarnak*** *(Princeton University)* | 21 May 2012, TIFR Mumbai
- **Mathematical Perspectives on Clouds, Climate, and Tropical Meteorology** | ***Andrew Majda*** *(Courant Institute of Mathematical Sciences)* | 22 January 2013, ICTS-TIFR Bangalore
- **Locally symmetric spaces, and Galois representations** | ***Peter Scholze*** *(University of Bonn)* | 25 March 2014, TIFR Mumbai
- **Automorphic forms and Galois representations** | ***Chandrashekhar Khare*** *(University of California Los Angeles)* | 3 November 2014, TIFR Mumbai

ALAN TURING LECTURE SERIES

- **The contextual bandits problem: A new, fast, and simple algorithm** | ***Robert Schapire*** *(Microsoft Research and Princeton University)* | 7 January 2015, IISc Bangalore
- **Versatility of Singular Value Decomposition** | ***Ravi Kannan*** *(Microsoft Research)* | 7 January 2015, IISc Bangalore
- **Overcoming Computational Intractability in Unsupervised Learning** | Sanjeev Arora *(Princeton University)* | 7 January 2015, IISc Bangalore

ICTS DISTINGUISHED LECTURES

- **Holography and Quantum Gravity** | ***Ashoke Sen*** *(Harish-Chandra Research Institute, Allahabad)* | 27 September 2012, ICTS-TIFR Bangalore
- **The Universe Before the Hot Big Bang** | ***Valery Rubakov*** (Moscow State University) | 24 November 2014, IISc Bangalore
- **Square Values of Mathematical Expressions, from Ancient Times to the Modern Day** | ***Manjul Bhargava*** (Princeton University) | 19 January 2015, TIFR Mumbai
- **Age of Networks** | ***Jennifer Tour Chayes*** (Microsoft Research New England and Microsoft Research New York City) | 21 January 2015, IISc Bangalore

OUTREACH

We all recognize the ability of fundamental science to transform lives. The knowledge of it is priceless and unparalleled. It is important for experts working in various areas of science to share new exciting developments and discoveries with the entire community.

At ICTS science outreach for school and college students and civic society in general is taken very seriously.

ICTS regularly organizes Public Lectures given by eminent visitors. Public Lectures bring exciting new developments in science to the general public and play an important role in engaging students and civic society at large on issues of modern science. The proceedings of ICTS activities are freely available in various formats on the ICTS website and on YouTube as well as on DVDs and CDs. ICTS is the India node for "Mathematics of Planet Earth", a global initiative for mathematics programs and outreach. As part of this program, ICTS, in collaboration with other scientific institutes in Bangalore, organized a hands-on math exhibition in Bangalore that saw over 32,000 visitors in a span of 10 days.

A sample of ICTS Public Lectures

- **Structure and Randomness in the Prime Numbers**
  ***Terence Tao**, University of California, Los Angeles*
  23 February 2012, TIFR Mumbai
- **The Ramanujan Conjecture and some Diophantine Equations**
  ***Peter Sarnak**, Princeton University and IAS, Princeton*
  18 May 2012, TIFR Mumbai and 25 May 2012, IISc Bangalore
- **Quantum Mechanics and Space-Time in the 21st Century**
  ***Nima Arkani-Hamed**, IAS Princeton*
  24 September 2012, IISc Bangalore
- **The Architecture of Biological Complexity**
  ***Sydney Brenner**, Salk Institute of Biological Sciences, San Diego*
  18 October 2012, IISc Bangalore
- **Quantum Reality**
  ***Sankar Das Sarma**, University of Maryland*
  12 December 2012, TIFR Mumbai
- **Strings and the Magic of Extra Dimensions**
  ***Cumrun Vafa**, Harvard University*
  5 June 2013, IISc Bangalore
- **A Physicist's View of Biology**
  ***Boris Shraiman**, Kavli Institute of Theoretical Physics, Santa Barbara*
  13 December, 2013, IISc Bangalore

ORGANISATION

ICTS is guided, nurtured and managed by three committees.

The International Advisory Board, chaired by David Gross, is unique in its existence among scientific institutions in India. It comprises distinguished people whose advice and guidance pertains to all aspects of ICTS. The ICTS Director submits a quarterly activity report to the Advisory Board.

The Management Board, chaired by the TIFR Director, oversees the overall administration and scientific direction of the Centre.

The Program Committee of ICTS consists of acknowledged leaders in different areas of theoretical sciences and interdisciplinary areas. Program proposals received by the Centre are circulated among its members for their views and advice.

INTERNATIONAL ADVISORY BOARD

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Institute for Advanced Study, Princeton
Elementary Particle Physics

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University of Edinburgh
Mathematics

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Mathematics

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Astrophysics

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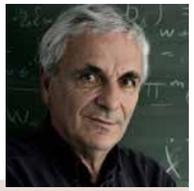
University of Maryland
Condensed Matter Physics

SENAPATHY GOPALAKRISHNAN
Co-founder and former CEO of Infosys

MICHAEL GREEN
Cambridge University
String Theory



DAVID GROSS, CHAIR
Kavli Institute for Theoretical Physics, Santa Barbara
Elementary Particle Physics, String Theory

RODDAM NARASIMHA
Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore
Earth Sciences, Fluid Dynamics

SUBIR SACHDEV
Harvard University
Condensed Matter Physics

ASHOKE SEN
Harish-Chandra Research Institute
String Theory

BORIS SHRAIMAN
The Kavli Institute for Theoretical Physics
Systems Biology

S. R. S. VARADHAN
Courant Institute, New York University
Mathematics

CAMPUS

The new ICTS campus is located in north Bangalore and spread over 78,000 square metres. This world-class residential campus has been designed to provide office space and on-site accommodation for more than 150 academic members, including 75 visitors. The campus will be equipped with a modern library that will provide access to books and electronic resources on advanced topics; state-of-the-art computing and networking infrastructure; a data centre with high-speed connectivity and extensive storage facility for doing big-data sciences; conference and lecture halls with high-end audio-video equipment for recording and broadcasting ICTS programs; healthcare, childcare and recreational facilities for members and visitors.

At present ICTS functions out of the Old TIFR and Raman buildings in the Indian Institute of Science, Bangalore. It has faculty offices, post-doctoral fellow and student rooms and seminar rooms. Most ICTS programs avail of IISc facilities.

The ICTS is a fantastic addition to Bangalore's science landscape. Its defining role, to reach out both to scientists as well as to the public, has helped bring existing institutions closer, and stimulated interactions which would not have otherwise happened.
–Mukund Thattai,
National Centre for Biological Sciences, Bangalore

It has been a great honor and privilege to be a part of the International Advisory Board of the ICTS, and to watch the ICTS grow from a dream to reality.

I am very excited about the inauguration of the ICTS, which will take place on June 20 of this year. I think the ICTS, through its numerous research activities, and through its varied lectures for scientists and the public, will play a vital role in advancing the science research culture of India.
–Manjul Bhargava,
Princeton University

MANAGEMENT BOARD (ACADEMIC MEMBERS)

Vivek Borkar (Indian Institute of Technology, Mumbai)
Avinash Dhar (International Centre for Theoretical Sciences; Tata Institute of Fundamental Research)
H. R. Krishnamurthy (Indian Institute of Science, Bangalore)
Dipendra Prasad (Tata Institute of Fundamental Research)
S. Ramakrishnan (Tata Institute of Fundamental Research)
Sandip Trivedi, Chair (Director, Tata Institute of Fundamental Research)
K. VijayRaghavan (NCBS and Secretary, Department of Biotechnology)
Spenta R. Wadia, Convener (Director, International Centre for Theoretical Sciences; TIFR

PROGRAM COMMITTEE

Tenure: August 1, 2014 - July 31, 2015
Amit Apte (International Centre for Theoretical Sciences)
Vivek Borkar (Indian Institute of Technology, Mumbai)
Kedar Damle (Tata Institute of Fundamental Research)
Arindam Ghosh (Indian Institute of Science, Bangalore)
Rajesh Gopakumar (Harish-Chandra Research Institute, Allahabad)
Sanjay Jain (Delhi University)
Tarun Souradeep (Inter-University Centre for Astronomy and Astrophysics, Pune)
R. Sujatha (University of British Columbia)
Mukund Thattai (National Centre for Biological Sciences, Bangalore)
Umesh Waghmare (Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore)

Tenure: August 1, 2014-July 31, 2016
Sandeep Krishna (National Centre for Biological Sciences, Bangalore)
Sreerup Raychaudhuri (Tata Institute of Fundamental Research)
Vijay Shenoy (Indian Institute of Science, Bangalore)
Aninda Sinha (Indian Institute of Science, Bangalore)

Indian Science has a long and proud history spanning many centuries and continuing to the present day. ICTS is an important node in helping with the continuation of this tradition and in serving as a meeting point for Indian scientists with the international scientific community.
–Cumrun Vafa,
Harvard University

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Permanent Address Shivakote, Hesaraghatta Hobli, North Bengaluru, India

Website www.icts.res.in

ICTS International Centre for Theoretical Sciences

TATA INSTITUTE OF FUNDAMENTAL RESEARCH