


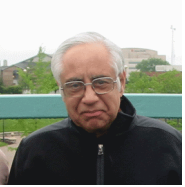


Workshop on Fundamentals of Quantum Information Processing

October 17-18, 2019

DAY 1

October 17, 2019

08:30 AM – 09:15 AM	Registration	
09:15 AM – 09:30 AM	Introduction	
09:30 AM – 11:00 AM	<p>Speaker: <i>Prof. N. D. Hari Dass</i> Title of the Talk: Quantum measurements. About the Speaker: Prof. N. D. Hari Dass retired as a Senior Professor from IMSc, Chennai. He is now a visiting professor at TCIS Hyderabad . He is a fellow of the National Academy of Sciences, Allahabad. Current research interests of Prof. Hari Dass are in high energy physics (working on strings in quantum chromodynamics), astrophysics (working on magnetars), and foundations of quantum mechanics (working on weak measurements).</p> <p>Email: dass@tifrh.res.in</p>	
11:00 AM – 11:30 AM	Tea Break	
11:30 AM – 01:00 PM	<p>Speaker: <i>Prof. Dipankar Home</i> Title of the Talk: Foundational aspects of quantum mechanics. About the Speaker: Prof. Dipankar Home is a theoretical physicist at Bose Institute, Kolkata. Prof. Home is one of the early Indian researchers to have initiated investigations on foundational issues of quantum mechanics. His research interests are: foundational issues of quantum mechanics like the quantum measurement problem, quantum nonlocality, quantum contextuality, weak measurements, unsharp measurements, multipartite Bell-type inequalities, applications of the Leggett-Garg inequality, macroscopic limits of the validity of quantum mechanics, time in quantum mechanics, and the quantum Zeno effect.</p> <p>Email: dhome@jbose.ac.in</p>	
01:00 PM – 02:00 PM	Lunch	
02:00 PM – 03:30 PM	<p>Speaker: <i>Dr. Ritabrata Sengupta</i> Title of the Talk: Quantum entanglement. About the Speaker: Dr. Ritabrata Sengupta is an assistant professor at the Department of Mathematics, IISER Berhampur. He is working on quantum information and computation, matrix analysis and application, information theory and quantum probability.</p> <p>Email: rb@iiserbpr.ac.in</p>	
03:30 PM – 04:00 PM	Tea Break	
04:00 PM – 05:00 PM	<p>Speaker: <i>Prof. Anil Kumar</i> Title of the Talk: NMR quantum computation. About the Speaker: Prof. Anil Kumar is a professor and an experimental physicist at the IISc Bangalore. He is known for his work in the field of nuclear magnetic resonance (NMR) quantum computing, and technique development in multi-dimensional NMR spectroscopy and their applications in the study of biomolecules. His work on NMR quantum computation and quantum information processing includes use of transition and spin-selective pulses in one and two dimensional NMR to prepare pseudo-pure states, to execute logical gates and to implement Deutsch-Jozse quantum algorithm.</p> <p>Email: anilnmr@iisc.ac.in</p>	

DAY 2

October 18, 2019

09:30 AM – 11:00 AM

Speaker: *Dr. Mário Ziman*

Title of the Talk: Quantum encryption.

About the Speaker: Dr. Mário Ziman is an associate professor at Faculty of Informatics, Masaryk University. His research interests are divisibility of quantum dynamical maps, collision models, study of measurements on quantum causal networks, quantum measurement discrimination, randomness, quantum entanglement and weak sources of quantum entanglement.



Email: ziman@savba.sk

11:00 AM – 11:30 AM

Tea Break

11:30 AM – 01:00 AM

Speaker: *Dr. Mandip Singh*

Title of the Talk: Photons and quantum information processing.

About the Speaker: Dr. Mandip Singh is an assistant professor and experimental physicist at the Department of Physical Sciences, IISER Mohali. He works on Quantum entanglement, quantum light, Bose-Einstein condensation, foundations of quantum physics and general physics.



Email: mandip@iisermohali.ac.in