

Young Investigator Meet On Quantum Condensed Matter Theory

[On 26th-27th October at Silver Jubilee Hall, S. N. Bose National Centre for Basic Sciences, Kolkata]

Day 1, 26th October 2017 (Thursday)

08:30 to 09:05 **Registration** (In front of Silver Jubilee Hall)

09:30 to 11:00 **Session I** **Chairperson – Dr. Sanjeev Kumar**

09:30 to 10:00	<i>Arijit Saha, IOP</i> (Cooper pair entangler device based on graphene superconductor)
10:00 to 10:30	<i>Arnab Sen, IACS</i> (Dynamics of entanglement propagation in periodically driven integrable systems)
10:30 to 11:00	<i>krishnendu Sengupta, IACS</i> (Phase diagram of graphene in the presence of low-frequency radiation)

11:00 to 11:30 **Tea time**

11:30 to 13:00 **Session II** **Chairperson – Dr. Sourin Das**

11:30 to 12:00	<i>Subhasis Sinha, IISER Kolkata</i> (Effect of spin-orbit interaction on localization transition of Bosons in a quasi-periodic potential)
12:00 to 12:30	<i>Tapan Mishra, IIT Guwahati</i> (Unconventional pairing of bosons in optical lattice)
12:30 to 13:00	<i>Arti Garg, SINP</i> (Many body localization in the presence of an aperiodic potential)

13:00 to 15:00 **Lunch and poster session** [Venue: Krishnachura 2 (new hostel)]

15:00 to 16:00 **Session III** **Chairperson – Dr. Priya Mahadevan**

15:00 to 15:30	<i>Ayan Datta, IACS</i> (Symmetry Breaking in Low-Dimensional Flat Materials)
15:30 to 16:00	<i>Kalpataru Pradhan, SINP</i> (A route to higher T_c diluted magnetic semiconductors)

16:00 to 16:30 **Tea time**

16:30 to 17:30 **Session IV** **Chairperson – Dr. Krishnendu Sengupta**

16:30 to 17:00	<i>Satyaki Kar, IACS</i> (Andreev tunnelling and Josephson current in light irradiated graphene)
17:00 to 17:30	<i>Saptarshi Mandal, IOP</i> (Degeneracy of all eigenstates of Kitaev model)

19:00 onwards : **Dinner** (Bhagirathi Guest House Canteen)

Day 2, 27th October 2017 (Friday)

09:30 to 11:00 Session I Chairperson – Dr. Anamitra Mukherjee

09:30 to 10:00	<i>Priya Mahadevan, SNBNCBS</i> (Doping an antiferromagnetic insulator: Route to an antiferromagnetic metal)
10:00 to 10:30	<i>Sanjeev Kumar, IISER Mohali</i> (Spin Hall Effect in the Rashba-Kondo Model on Square Lattice)
10:30 to 11:00	<i>Soumendu Datta, SNBNCBS</i> (Promises of Bismuth Oxyhalide layered materials for energy applications)

11:00 to 11:30 Tea time

11:30 to 13:00 Session II Chairperson – Dr. Siddhartha Lal

11:30 to 12:00	<i>V. Ravi Chandra, NISER</i> (The spin-1/2 Heisenberg antiferromagnet on the Pyrochlore lattice : An exact diagonalisation study)
12:00 to 12:30	<i>Manoranjan Kumar, SNBNCBS</i> (Multipolar Phase in Frustrated Ferromagnetic Spin-1/2 Chain with Long Range Interaction)
12:30 to 13:00	<i>Sunil Kumar Mishra, IIT BHU</i> (Helical multiferroics and qubit(s) transfer)

13:00 to 15:00 Lunch and poster session [Venue: Krishnachura 2 (new hostel)]

15:00 to 16:00 Session III Chairperson – Dr. Arnab Sen

15:00 to 15:30	<i>Anamitra Mukherjee, NISER</i> (Disorder driven non-Fermi liquid states in a Mott insulator)
15:30 to 16:00	<i>Arijit Kundu, IIT Kanpur</i> (Interacting quantum systems under periodic drive)

16:00 to 16:30 Tea time

16:30 to 17:30 Session IV Chairperson – Dr. V. Ravi Chandra

16:30 to 17:00	<i>Siddhartha Lal, IISER Kolkata</i> (Orbital and spin ordering physics of the Mn_3O_4 spinel)
17:00 to 17:30	<i>Sourin Das, IISER Kolkata</i> (Dissipation and noise in quantum hall edge circuitry)

19:00 onwards : Dinner (Bhagirathi Guest House Canteen)