

#### **PROGRAMME SCHEDULE**

### 29 January 2013

9.00 - 10.00		Registration
-	10:00 -10:30	Inauguration and Director's Address
	Session 1	Condensed Matter Physics and Material Science (I)
S No.	Session Chair:	Dr. Priya Mahadevan
1.1	10:30 – 10:45	A cation effect on magnetic properties of double perovskite compounds: From ferromagnetic Ca2CrSbO6 to antiferromagnetic Sr2CrSbO6
		Santu Baidya
1.2	10:45 – 11.00	Observation of a large Photo-response in a Single Nanowire (diameter ~30nm) of Charge Transfer Complex Cu:TCNQ
		Rabaya Basori
1	1:00 - 11:30	Tea Break
1.3	11:30 – 11:45	Electronic Structure of ZnS nanoplatelets
		Ruma Das
1.4	11:45 – 12:00	A new hat for the passivating species
		Saikat Debnath
1.5	12:00 – 12:15	Relativistic fermion on a ring: Energy spectrum and Persistant Current
		Sumit Ghosh
1.6	12:15– 12:30	Effect of inhomogeneities on magnetic properties of disordered FeAl alloys
		Tanmoy Ghosh
1.7	12.20 12.45	Collective Magnetization Dynamics of Arrays of
1./	12:30– 12:45	Ferromagnetic Nanoelements with Varying Shapes Bipul K. Mahato
		First-Principles study of $CaCu_3B_4O_{12}$ ( $B=Cr, Co, Rh, Ir$ )
1.8	12:45-13.00	1 1
		Swarnakamal Mukherjee



#### **PROGRAMME SCHEDULE**

13	3:00 – 14:30	Lunch and Poster Sessions – (P1 – P19)
	Session 2	Condensed Matter Physics and Material Science (II)
S No.	Session Chair:	Dr. Anjan Barman
1.9	14:30 – 14:45	Effect of the Spin-Twist Structure on the Spin-Wave Dynamics of the Fe <sub>55</sub> Pt <sub>45</sub> /Ni <sub>80</sub> Fe <sub>20</sub> Exchange Spring Bilayers with varying Ni <sub>80</sub> Fe <sub>20</sub> thicknesses
		Semanti Pal
		Effect of Mn doping on structural properties of
1.10	14:45 – 15:00	Ni2Mn1+xSn1-x Heusler alloys: Experiment and Theory
		Soumyadipta Pal
		Size Dependent Magnonic Spectra in Lithographically
1.11	15:00 – 15:15	Patterned Ferromagnetic Nanodots size Dependent
		Bivas Rana
		Tunable and Anisotropic Spinwaves in Two-Dimensional
1.13	15:15- 15:30	Nanodot Lattices with Variable Lattice Symmetry
		Susmita Saha
1.14	15:30 – 15:45	Spin dynamics and topological excitations in quantum spin systems on low dimensional lattice
		Subhajit Sarkar
15	5:45 – 18:00	Tea and Poster Sessions (P1 – P19)
18	8:00 – 20:00	Classical Performance by Pandit Dinanath Mishra and his Group.
20:0	0 hrs. onwards	Family Dinner

### 30<sup>th</sup> January 2013

	Session: 3	Chemical Biological and Macromolecular Science (I)
S No.	Session Chair:	Dr. Jaydeb Chakrabarti
2.1	10:00 – 10:15	Spectroscopic Studies on the Biomolecular Recognition of Medicinally Important Ligands
		Soma Banerjee
2.2	10:15 – 10:30	Spectroscopic investigation on fluorescent probes in biologically relevant and engineered environments  Subrata Batabyal



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2.3	10:30 – 10:45	Temporal Heterogeneity in Deep Eutectic Melts: Competition Between Domain Fluctuation and Solute Rotation
		Anuradha Das
2.4	10:45-11:00	Effects of Trehalose on the Dynamics of Glycerol
		Sandipa Indra
1	1:00 - 11:30	Tea Break
2.5	11:30 – 11:45	Electron transport through molecules: a quantum master equation approach Anirban Karmakar
2.6	11:45 – 12:00	Studies On Biomolecular Recognition Using Ultrafast Laser Spectroscopic Techniques Tanumay Mondol
2.7	12:00- 12:15	Temperature dependent orientational relaxation in a room temperature ionic liquid : An all-atom simulation study  Tamisra Pal
2.8	12:15 – 12:30	Spectroscopic Studies on Structure, Function and Dynamics of Biomolecules in Presence of Other Biologically Relevant Macromolecules
		Surajit Rakshit
2.9	12:30-12:45	Spectroscopic Studies on the Interactions of Biomimetics with Biological Macromolecules
		Ranajay Saha
2.10	12:45-13:00	Spectroscopic Studies on Photoreactivity of Inorganic Nanocrystals and Medicinally Important Organic Dyes
		Soumik Sarkar
2.11	13:00 – 13:15	Synthesis and Characterization of Multifunctional Nanoparticles and their interaction with Biological Macromolecules Anupam Giri
1.2	13:15 – 13:30	Possibility of Occurrence of Superconductivity Via Exciton Mechanism in Quasi One Dimensional Material Soumi Roy Chowdhury



#### **PROGRAMME SCHEDULE**

13:30 – 14:30		<b>Lunch and Poster Sessions – (P20 – P39)</b>
	Session 4	Astrophysics & Cosmology
S No.	Session Chair:	Dr. Sandip Chakrabarti
3.1	14:30 – 14:45	Strong quantum violation of the gravitational weak equivalence principle by a non-Gaussian wave packet
		Priyanka Chowdhury
3.2	14:45 – 15:00	A complementary relation between classical bits and randomness in local part in the simulating singlet state
		Subhadipa Das
3.3	15:00 – 15:15	Fine-grained uncertainty relation and biased non-local games in bipartite and tripartite systems
		Ansuman Dey
3.4	15:15– 15:30	Study of H_2 formation on the interstellar dust grain using CTRW Monte Carlo Simulation
		Wasim Iqbal
3.5	15:30– 15:45	Detecting mixedness of quantum system using uncertainty relation
		Shiladitya Mal
10	6:00 – 17:30	Tea and Poster Session (P 20 – P39)
1'	7:45-20:00	Institute Cultural Programme
20:00 hrs. onwards		Family Dinner

### 31st January 2013

	Session 5	Theoretical Physics
S No.	Session Chair:	Dr. Amitabha Lahiri
4.1	10:00 - 10:15	Information exchange and sorting in a community
		Biplab Bhattacherjee
4.2	10:15 - 10:30	Topology of Complex Bridges inside Vibrated Dry Granular
		Media
		Bandan Chakraborty
		Thermal E_ective Potential in two and three dimensional
4.3	10:30 - 10:45	Noncommutative spaces
		Yendrembam Chaoba Devi



#### **PROGRAMME SCHEDULE**

i.		FROGRAMME SCHEDOLE
		Proposed evidence for superconductors with a Lifshitz tri-
4.4	10:45 – 11:00	critical point and a spatially-modulated Fulde-Ferrell-
		Larkin-Ovchinnikov-type order parameter
		Arghya Dutta
	11:00-11:30	Tea Break
4.5	11:30 – 11:45	Holographic s -wave condensate with non-linear
		electrodynamics
		Arindam Lala
		Fast Relaxation towards Strong Phase Separation (SPS):
4.6	11:45 – 12:00	Hard Core Particles Sliding on a Fluctuating Surface
		Sukla Pal
		Gauge invariances of higher derivative Maxwell-Chern-
4.7	12:00- 12:15	Simons field theory.
		Biswajit Paul
4.8	12:15 – 12:30	Shaking-induced crystallization of dense sphere packings
		Dattatray P. Shinde
		Weak coupling loop perturbation theory in SU(2) lattice
4.9	12:30– 12:45	gauge theory
		Sreeraj T.P
	2:45 – 13:00	Closing remarks by Deans and Director
	3:00 – 14:15	Lunch Break
	14:15- 14:25	Photo Fest - Introduction & Felicitation
	14:30 - 15:10	Slide Show on "People" by Dr. S. Sarkar, SINP
	15:10- 15:30	"Journey to Sandakphu" by Snehasis DasChakraborty, SNBNCBS
	15:30- 16:00	Slide Show on "Life" by Dr. P.S Deo, SNBNCBS
1	16:00 - 16:10	Interactive Session
	16:10- 16:50	Prize Distribution
	16:50- 17:20	Tea and Refreshments
	17:20- 17:35	"Prejudice: by Members of Photography Club, SNBNCBS
1	17:35 - 17:50	Performance: "A Message" by Pratik Tarafdar, SNBNCBS
	17:50 hrs. onwards	Film Screening