

# Programme for the 2 day meeting at the Department of Physics, University of Calcutta

27<sup>th</sup> June 2011

10-00	Welcome
10-15 – 11-00	<b>Soumitra Sengupta, IACS</b> <i>Key issues in braneworld model</i>
11-00 – 11-15	Tea
11-15 – 12-15	<i>Neutrino Masses and Mixing from Bilinear R-Parity Violation :</i> <i>Roshni Bose</i>
	<i>Custodial Symmetry and <math>\rho</math>-parameter : Avirup Shaw</i>
	<i>Role of New Physics in Reconciling Recent Experimental Results :</i> <i>Sunando K. Patra</i>
12-30 – 1-15	<b>Bhupendra Nath Dev, IACS</b> <i>Seeing atoms and building quantum structures atom by atom</i>
1-15 – 2-00	Lunch
2-00 – 3-15	<i>Study of Ion Irradiation Effect on Mn Doped ZnO Samples :</i> <i>Swarup K. Neogi,</i>
	<i>Magnetodielectric effect in composite media : An interface effect :</i> <i>Sreemanta Mitra</i>
	<i>Effect of Mn doping on Structural and Optical Properties of</i> <i>Zn<sub>1-x</sub>Mn<sub>x</sub>O thin films : Rupa Karmakar</i>
	<i>Study of thermoelectric materials with practical application :</i> <i>Kartick Malik</i>
3-15 – 3-30	Tea
3-30 – 4-45	<i>Excess energy of an ultracold Fermi gas in a trapped geometry :</i> <i>Shyamal Biswas,</i>
	<i>Nickel Sulphide nanoplates within Na-4 mica : Amrita Mandal</i>
	<i>Multi-affinity of pinned interfaces in imbibition : Palash Nath</i>
	<i>Universal Diamagnetism of spinless Bose system : Debnarayan Jana</i>
4-45	Tea

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**10-00 – 10-45**

**Subhasis Chattopadhyay, VECC**

***High energy heavy ion experiments: LHC to FAIR***

*10-45 – 11- 45*

*Study of Phase diagram and Fluctuations using PNJL model with Multi-quark interactions : Paramita Deb*

*Microscopic calculation of proton capture reactions in mass 60-80 region and its astrophysical implications : Chirashree Lahiri*

*Separation Energy & Drip-line Study on Single-A Hypernuclei : Bipasha Bhowmick*

11- 45 – 12-00

Tea

**12-00 – 12-45**

**Manash Mukherjee, IACS**

***Using the art of quantum engineering in fundamental science***

*12-45 – 1-30*

*Two-photon resonances in a cascade-type system for the <sup>87</sup>Rb atoms  
Md. Mabud Hossain*

*Observation and theoretical analysis of non-linear coherent resonances in atomic vapour : Soma Mitra*

1-30 – 2-30

Lunch

**2-30 – 3-15**

**Raja Paul, IACS**

***A stochastic model for tumour induced angiogenesis***

*3-15 – 4-30*

*Behavior of heat capacity of an attractive Bose-Einstein Condensate : Sanchari Goswami*

*Bose Einstein Condensation : A quantum many-body approach : Anindya Biswas*

*Zero temperature quenching dynamics in two dimensional ANNNI Model : Soham Biswas*

*Origin of the tilt in layered crystalline Mesophases : Tushar K. Bose*

4-30

Tea