



K S Krishnan Discussion Meet

Frontiers in Quantum Science

FQS2008

Quantum Matter & Quantum Information

1,2 December 2008

Ramanujam Auditorium

The Institute of Mathematical Sciences, Chennai 600 113

Program

1 Dec 2008

8:45 - 9:25		Registration
9:25 - 9:30	R Shankar	Welcome
9:30 - 9:40	G Baskaran	Scope of the KSK Meet
9:40 - 10:20	C.M. Chandrasekhar	Coherent control of quantum many body systems using quantum random walks
10:20 - 11:00	Sourin Das	Detecting non-Abelian quasi particles in a fractional quantum Hall state
11:00 - 11:30	TEA	
11:30 - 12:10	Chiranjiv Mitra	Experimental realisation of Qbits
12:10 - 1:00	Arindam Ghosh	Experimental realisation of Qbits
1:00 - 2:00	LUNCH	
2:00 - 2:40	Sougato Bose	Entangling the ends of a many body system
2:40 - 3:20	Sumathi Rao	Quantum Junctions
3:20 - 3:50	TEA	
3:50 - 4:20	Deepak Kumar	Quantum Information Processing using Electromagnetically induced transparency
4:20 - 5:00	K Sengupta	Kondo effect in graphene
5:00 - 5:40	Rajesh Narayanan	Quantum Phase Transitions
5:40 - 6:20	Diptiman Sen	Quantum Games

Program

2 Dec 2008

9:10 - 9:50	Ravi Puri	Local hidden variable theory for two qubit systems
9:50 - 10:30	Hema Ramachandran	Experiments with cold atoms
10:30 - 11:10	R Shankar	Quantum Number fractionization in Kitaev Model
11:10 - 11:40	TEA	
11:40 - 12:20	Bruce Normand	Monopoles and deconfined spinons in pyrochlore antiferromagnets
12:20 - 1:00	G Kar	BKS Theorem & non-locality
1:00 - 2:00	LUNCH	
2:00 - 2:40	Sudhakar Yarlagadda	Entanglement in a spin chain
2:40 - 3:20	Som Bandopadhyay	Monogomy & Entanglement measures
3:20 - 4:00	TEA	
4:00 - 4:40	Arul Lakshminarayanan	Random Matrix Entanglement
4:40 - 5:20	Sibasish Ghosh	Entanglement sudden death & energy exchange
5:20 - 6:00	Jagtap	Experiments with cold atoms
6:00 - 6:20	R Simon	Concluding Remarks

Organisers

G. Baskaran, Sibasish Ghosh, A K Mishra, R. Shankar and R. Simon
<http://www.imsc.res.in/> **email: qit@imsc.res.in**