

PROF. SUBHASH CHATURVEDI
QUST- DST MEETING

21st-23rd, April 2018

The Department of Physics, IISER Bhopal hosted the Quantum Enabled Engineering and Science QuEST meeting under the aegis of the DST during 21-23 April 2018. The meeting brought together close to hundred theorists and experimentalists from all over the country engaged in the field of quantum computing and information processing.

PROGRAMME

21st April, 2018:

Time	Particulars
09:15 am- 09:30 am	Welcome Address : Prof. Vinod K Singh, Director IISER Bhopal
	Scope and Objectives of the QUST-DST Initiative : Dr. K R Murali Mohan Head (ICPS DST)
	Opening Remarks : Prof. KrishanLal, Former Director, NPL

Time	Name	Institute	Title
09:30 am 11:15 am	Sajeev D [P 08]	KNMGAS, Kanjiramkulam, Tvm	Kerala Development of an experimental set up to study quantum maps on photonic qubit
	Shailendra Kumar Varshney	IIT, Kharagpur	Design and development of single and entangled photon sources for quantum photonic

	[P 14]		applications
	Anil Prabhakar [P 29]	IIT, Madras	Measurement based quantum computing with cluster states
	Srinivas Talabattula [P 40]	IISc, Bangalore	Quantum information technology using photonics
	Bijoy Krishna Das, [P 44]	IIT, Madras	Integrated quantum optical circuit for entangled photon pair generation and manipulation in silicon photonics platform
	V Narayanan, [P 46]	IIT, Jodhpur	Generation of entangled photons and its applications to quantum computation and information processing
	Debabrata Goswami, [P 64]	IIT , Kanpur	Ultrafast laser approaches to quantum information and computing
11:15 am 11:30 am	Tea Break		
11:30 am 01:30 pm	Bhaskar Kanseri [P 86]	IIT, Delhi	Entanglement enhanced qubit generation for quantum informatics
		IISER,	Quantum information processing and quantum imaging with

	Mandip Singh [P 101]	Mohali	photons
	Anand Kumar Jha [P 115]	IIT, Kanpur	Developing efficient methods for the measurement and characterization of high dimensional quantum states for photonic quantum computation
	Chiranjib Mitra [P 22]	IISER, Kolkata	Fabrication and implementation of spin qubit based quantum gates for quantum information processing in solid state systems
	Kumaragurubaran Somu [P36]	IISER, Tvm	Materials engineering for quantum information technology
	Kasturi Saha [P 58]	IIT, Bombay	Diamond based quantum technologies
	T S Mahesh [P67]	IISER, Pune	Magnetically resonated spin qubits NV centers and NMR
	Suddhasatta Mahapatra [P 72]	IIT, Bombay	Development of a quantum information processor with electron spin qubits in silicon
01:30 pm 02:30 pm	Lunch Break		
	Kavita Dorai [P 74]	IISER, Mohali	Quantum computing, controlling decoherence, and quantum simulations on an NMR quantum computer

	Rajesh V Nair [P94]	IIT, Ropar Ropar	Nanophotonic control on the emission properties of colour centers in nanodiamonds for quantum optical applications
	Madhu Talakulam [P 106]	IISER, Tvm	Realizing distributed quantum computing with silicon based qubits
	Umakant Damodar Rapol [P 110]	IISER, Pune	A novel atom-plasmon based platform for distributed and scalable quantum computer
02:30 pm 04:30 pm	Ajay Wasan [P 27]	IIT, Roorkee	Quantum computing with trapped Rubidium atoms
	Kanhaiya Pandey [P 31]	IIT, Guwahati	Towards scalable quantum computer using Yb atoms in an optical lattice
	Rajamani Vijayraghavan [P 12]	TIFR, Mumbai	Scaling up quantum processors using superconducting circuits
	Vibhor Singh [P 43]	IISc, Bangalore	Demonstration of a 4-qubit quantum processor using superconducting qubits in scalable architecture
04:30 pm 04:45 pm	Tea Break		

04:45 pm 06:30 pm	AnanthVenkatesan [P 55]	IISER, Mohali	Hybrid superconducting and rare earth ion systems for quantum memories and related devices
	Sonjoy Majumdar [P 16]	IIT, Kharagpur	Transportation of entanglement through Rydberg atoms trapped in photonic lattice
	B Praveen [P 35]	IIT, Madras	Foundations for a scalable quantum computing technology based on NV centers in diamond
	Indranil Sengupta [P87]	IIT, Kharagpur	Efficient realization of quantum gate operations incorporating parallelism and fault tolerance
	Archan S Majumdar [P 98]	SNBNCBS, Kolkata	Applications of quantum information
	Prasanta K Panigrahi [P 95]	IISER, Kolkata	Quantification and use of entanglement and coherence for designing a quantum simulator
	Ashutosh Kumar Singh [P 112]	NIT Kurukshetra	Design and implementation of logic circuits for quantum computers
	Director's Dinner		