

# SERB School on Frontiers in Quantum Optics



DECEMBER 1-19, 2017

Indian Institute of Technology Guwahati



## About SERB\* School:

Quantum Optics has now become an essential tool in exploring and developing quantum physics mediated technologies. Sophisticated probes of atoms and photons permit new insights into the foundations of quantum mechanics, with a focus on its counter-intuitive non-local character. They are also motivated by realization of futuristic applications such as quantum computing, cryptography and teleportation, and exciting advances in laser cooling and trapping. The objective of the school is to prepare and motivate research students, post doctoral fellows, and lecturers towards building up the thorough knowledge in this fascinating area and also to be acquainted with the recent progresses in both theoretical and computational fronts.

\*formerly known as SERC School

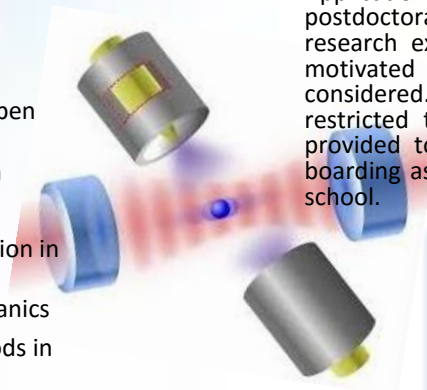
### Courses:

#### Basic:

- Quantum Optics

#### Advanced:

- Quantum optics for open systems
- Quantum Information
- Atomic Coherences
- BEC and phase transition in optical Lattice
- Quantum Opto-mechanics
- Computational methods in Quantum Optics

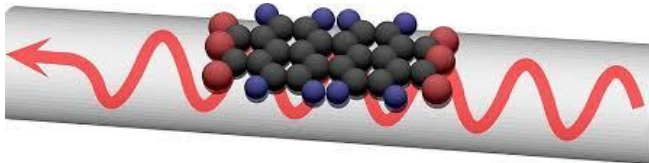


### How to apply:

Application forms can be downloaded from <http://www.iitg.ernet.in/aksarma/dst-serc> and submitted either by email ([serc.quantum@gmail.com](mailto:serc.quantum@gmail.com)/[aksarma@iitg.ernet.in](mailto:aksarma@iitg.ernet.in)) or by post to:

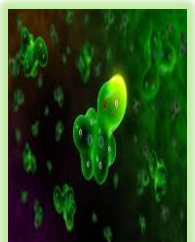
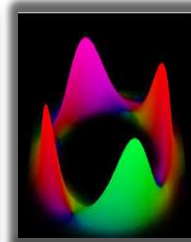
Dr. Amarendra Kumar Sarma  
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Guwahati-781039, Assam

Along with the application, one recommendation (from the Supervisor for Ph.D./Post-doctoral students and Head of Department for faculty employed in an Institute) is to be sent by the applicants.



### Participation and Funding:

Applications are invited from interested Ph.D. students, postdoctoral fellows and junior faculty members, having relevant research experience, to participate in the school. A few highly motivated final year M.Sc. and B. Tech students may also be considered. The total number of participants in the school is restricted to about **forty**. All the selected participants will be provided to-and fro II AC train (or bus) fare, free lodging and boarding as per DST norms and are required to attend the entire school.



### Important Dates:

**Last date of application:** 17<sup>th</sup> July, 2017  
**Intimation to participants:** 25<sup>th</sup> July, 2017  
**Confirmation by participants:** 18<sup>th</sup> Aug, 2017  
**School :** 1<sup>st</sup> – 19<sup>th</sup> Dec, 2017

### Contact:

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