

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & 2B, Raja S.C. Mullick Road, Jadavpur, Kolkata-700032, India

Seminar Notice

Org. by
School of Physical Sciences

Title:	Quantum technologies based on open quantum systems
Speaker:	Victor Mukherjee, School of Physical Sciences, IISER Berhampur
Date:	June 10, 2019 (Monday)
Time:	4:00 p.m.
Venue:	Physics Seminar Room (C-406), 3rd Floor, Centenary Building, IACS
Abstract:	Studies of technologies based on quantum systems have gained immense importance in recent years, owing to the current experimental progress in control of quantum systems. I will talk about technologies based on open quantum systems. I will show how efficiencies of quantum heat engines powered by squeezed thermal reservoirs can surpass the Carnot limit, without violating the second law of thermodynamics. I will also talk about dynamical control of quantum systems, which can lead to quantum advantage in quantum heat machines, as well as enable us to perform high-precision low-temperature thermometry close to the absolute zero.

All are cordially invited to attend the seminar