

Open Talk

10th August, 2018

4:00 PM

Fermion Hall

SPEAKER

Dr. Avijit Misra

PDF, The Institute of Mathematical Sciences, Chennai

TITLE OF THE TALK

The role of quantum resources in thermal machines

ABSTRACT

To understand and thereby enhance the performance of quantum heat engines, it is necessary to investigate the quantumness of the working substance. Moreover, athermal baths can also offer advantages over the thermal ones. Therefore, the role of quantum resources in thermal machines has become an active domain of research of late. I will discuss the role of quantum resources in the functioning of heat engines, focussing mainly on the quantum absorption refrigerators. I will also discuss the effect of the two-mode squeezed bath on the Otto cycle heat engines.

HOST FACULTY

Professor Archan S Majumdar

Senior Professor

Department of Astrophysics & Cosmology

S. N. Bose National Centre for Basic Sciences
