

THEORETICAL PHYSICS SEMINAR

Title: Continuous transitions between quantum and classical systems

Speaker: Prof. Partha Ghose, Former Professor, S.N. Bose National
Centre
for Basic Sciences, Kolkata; Chairman, Satyajit Ray Film and
Television Institute, Kolkata.

Date/Time/Venue: 4th August (Thursday)/4:00 PM/ Room No. 469

Tea will be served at 3:30pm outside Room 469

ABSTRACT

The conventional demonstrations that classical mechanics is a limiting case of quantum mechanics are misleading. The purpose of the talk will be to offer a new equation which provides a continuous link between quantum and classical systems. Examples will be given to show these transitions in a few simple cases. New predictions can be made using this method for mesoscopic systems.

References:

P. Ghose, ``Continuous Transition Between Quantum and Classical Mechanics I'', Found. of Phys. vol 32, 871-892 (2002).

P. Ghose and M. K. Samal, ``Continuous Transition Between Quantum and Classical Mechanics II'', Found. of Phys. vol 32, 893-906 (2002).

W P Schleich, D M Greenberger, D H Kobe and M O Scully, ``A wave equation interpolating between classical and quantum mechanics'', Phys. Scr. vol 90,108009 (2015).

All are welcome to attend