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

Seminar Notice

Org. by

School of Physical Sciences

Title:	**The motion of extended objects in curved spacetime**
Speaker:	**Sajal Mukherjee,IISER, Kolkata**
Date:	**October 3, 2018 (Wednesday)**
Time:	**3:30 p.m.**
Venue:	**Physics Seminar Room (C406),3rd Floor, Centenary Building, IACS**
Abstract:	Motion of extended objects are useful to understand the behavior of massive astrophysical objects in the nature. By relaxing the test particle approximation and considering the higher order mass moments, one can establish the dynamics of such particles in any gravitational field. However the first order correction as described by the Mathisson-Papapetrou equations, provide a substantial modification to the test particle limit and also capture some of the essence of approximated two body problem in general relativity. I shall introduce these equations along with their various implications in different astrophysical settings.

All are cordially invited to attend the seminar