

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:	Gravitational Dark Matter
Speaker:	Bohdan Grzadkowski, University of Warsaw, Poland
Date:	December 11, 2019 (Wednesday)
Time:	16:00 Hours
Venue:	Physics Seminar Room (C406), 3rd Floor, Centenary Building, IACS
Abstract:	We explore a possibility of dark matter (DM) interacting with the visible sector only through gravity. We consider the case of the vector DM and discuss both perturbative and non-perturbative mechanisms that can be relevant for DM production. In the first case, we investigate particle production during reheating phase via freeze-in mechanism, while the latter refers to the particle creation in the time-varying background during inflation. In each case, we find a viable range in parameter space which reproduces the observed DM relic abundance.

All are cordially invited to attend the seminar