

ACHIEVEMENTS OF INSTITUTE OF PHYSICS, BHUBANESWAR (IOP)

(During Last Quarter, 2016)

The Institute has been making substantial contributions to the field of theoretical and experimental physics. Two new faculty members have joined. Institute is actively involved in collaborations with CERN (Switzerland) ([ALICE](#), [CMS](#)), [BNL](#) (USA), [ANL](#) (USA), [GSI](#) (Germany), India-based Neutrino Observatory ([INO](#)) and MaxPlank (Germany). Around 30 papers have been published in high impact journals.

1. Important contributions to the simulation studies of the Iron Calorimeter (ICAL) detector and identification of neutrino mass ordering, mixing angles, and CP-violation in INO.
2. Development of 4-GEM prototype detector of India in ALICE at CERN.
3. Development of GdAlO₃ as magnetic refrigerant for liquefying hydrogen and organometallic halides solar cells with 16.4% of efficiency.
4. Studies on RG-flow and thermodynamics of causal horizons in higher derivative AdS gravity.
5. Strong out-reach programme



RAENPSM Workshop on 2nd October, 2016 @ Soro, Odisha



Atoms in service of Man Kind on 23rd October, 2016 @ Adaspur, Odisha