## DEPARTMENT OF PHYSICS Centre of Advanced Studies in Physics PANJAB UNIVERSITY, CHANDIGARH – 160 014, (INDIA)

 Fax
 :+ 91-172-2783336

 Tel
 :+ 91-172-2534466

 Email:
 <u>physics@pu.ac.in</u>



PHS : .....

Dated: 25.10.2018

## DEPARTMENT SEMINAR NOTICE

- SPEAKER: Prof. Jurgen Bosse Fachbereich Physik Freie Universit<sup>~</sup> at Berlin Berlin, Germany
- TITLE: Dipole susceptibility relating optical potential and Photon-scattering rate
- DATE & DAY: 5 November 2018, Monday
- VENUE: Seminar Hall
- TIME: 4.00 P.M.

## Abstract:

An atom, which is irradiated by two head-on laser beams of equal frequency, will be exposed to an oscillating electric field resulting from superposition of the two linearly-polarized plane-wave electric fields of wave vector  $\mathbf{k}$  and  $-\mathbf{k}$  associated with the light beams. Applying linear-response theory, it is demonstrated how dipole susceptibility relates optical dipole potential (ac-Stark effect) and photon scattering rate.

## About the Speaker:

Prof. Jurgen Bosse, Fachbereich Physik Freie Universit<sup>\*</sup> at Berlin, Gernany is a theoretical Condensed Matter physicist with interests in dynamical properties of quantum fluids, glass transitions, Bose-Einstein condensation: current correlations of trapped low temperature gases. He held visiting professor positions at various Institutions, MIT, U.S.A., Kyoto University, Japan; Panjab University, Chandigarh; IIT Roorkee etc.

All interested are cordially invited to attend.

Chairperson