

# Seminar

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## Institute for Plasma Research

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**Title :** Metastable Molecules and atomic oxygen in O<sub>2</sub> Plasmas probed by High-Resolution Fourier Transform Absorption Spectroscopy & TALIF technique

**Speaker :** Mr. Abhyuday Chatterjee <sup>1,2</sup>

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**Date :** 10th October 2017 (Tuesday)

**Time :** 03.30 PM

**Venue :** Seminar Hall, IPR

**Abstract :**

DC glow discharges in pure oxygen were studied by high resolution VUV absorption spectroscopy using synchrotron radiation and a Fourier Transform Spectrometer. O<sub>2</sub>(X), O<sub>2</sub> (a), O<sub>2</sub> (b) and ground state O atoms were observed, allowing their absolute densities to be determined as a function of gas pressure and discharge current. Gas temperature was measured from Doppler width by two photon LIF and atomic density is to be compared by the same technique.

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