

Internal Seminar

Mesoscopic scale targets for intense lasers

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Femtosecond laser produced plasmas are being studied in the wide range of targets, with a size variation from 1nm clusters to bulk metal targets. In our lab, investigations on plasma evolution is being done on targets with 10nm clusters and 15micron methanol droplets targets. To fill the gap and to study the size of ($L = \lambda$ to 10λ); we have built an instrument for target engineering to study laser coupling into microplasma. The local field enhancement inside the microplasma due to geometry of the target improves the efficiency of hot electron generation and x- ray conversion efficiency.

I will discuss about unique way to increase x-ray conversion efficiency and will illustrate the experimental developments being made to understand these phenomena.

Friday, Nov 3rd 2017

02:00 PM (Tea/Coffee at 01:45 PM)

Class Room-3, TIFR (FReT-B)