

Seminar

Light – Matter Interactions: Study of Intense Fields, High Energy Densities, and Extreme States of Matter

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Study of extreme states of matter for pushing the boundaries of basic physics and inventing novel applications is an active area of research. Investigations in this field are accomplished using ultra-intense lasers of very short pulse duration. I will present a summary of various works I have undertaken in this area, viz., terahertz generation, long distance filamentation, superluminal electron dynamics in matter, creation of colossal magnetic fields, and proton acceleration. An overview of future work-plan related to my research experience will be presented, including plans to utilize the upcoming Petawatt laser facility.

Tuesday, Apr 3rd 2018

04:00 PM (Tea/Coffee at 03:30 PM)

Seminar Hall, TIFR-H