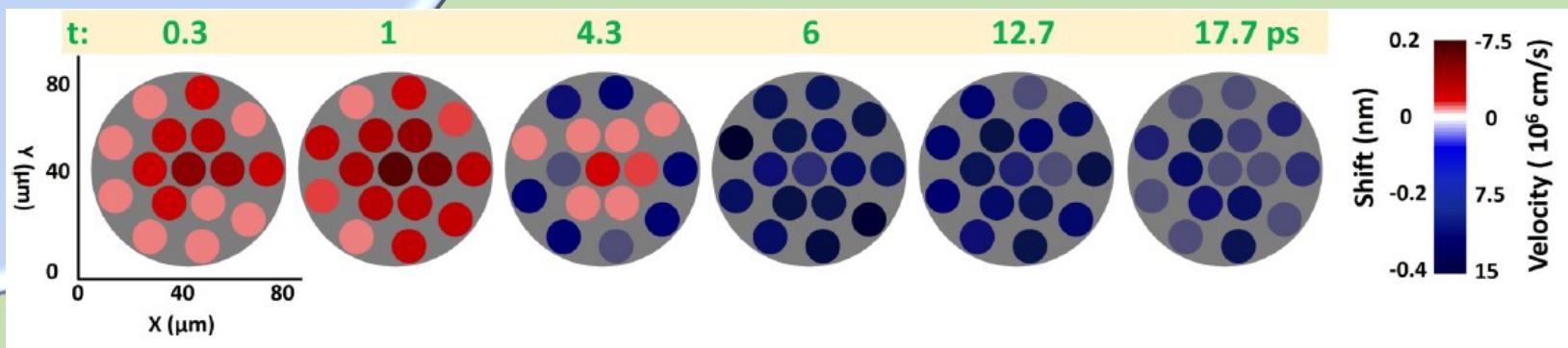
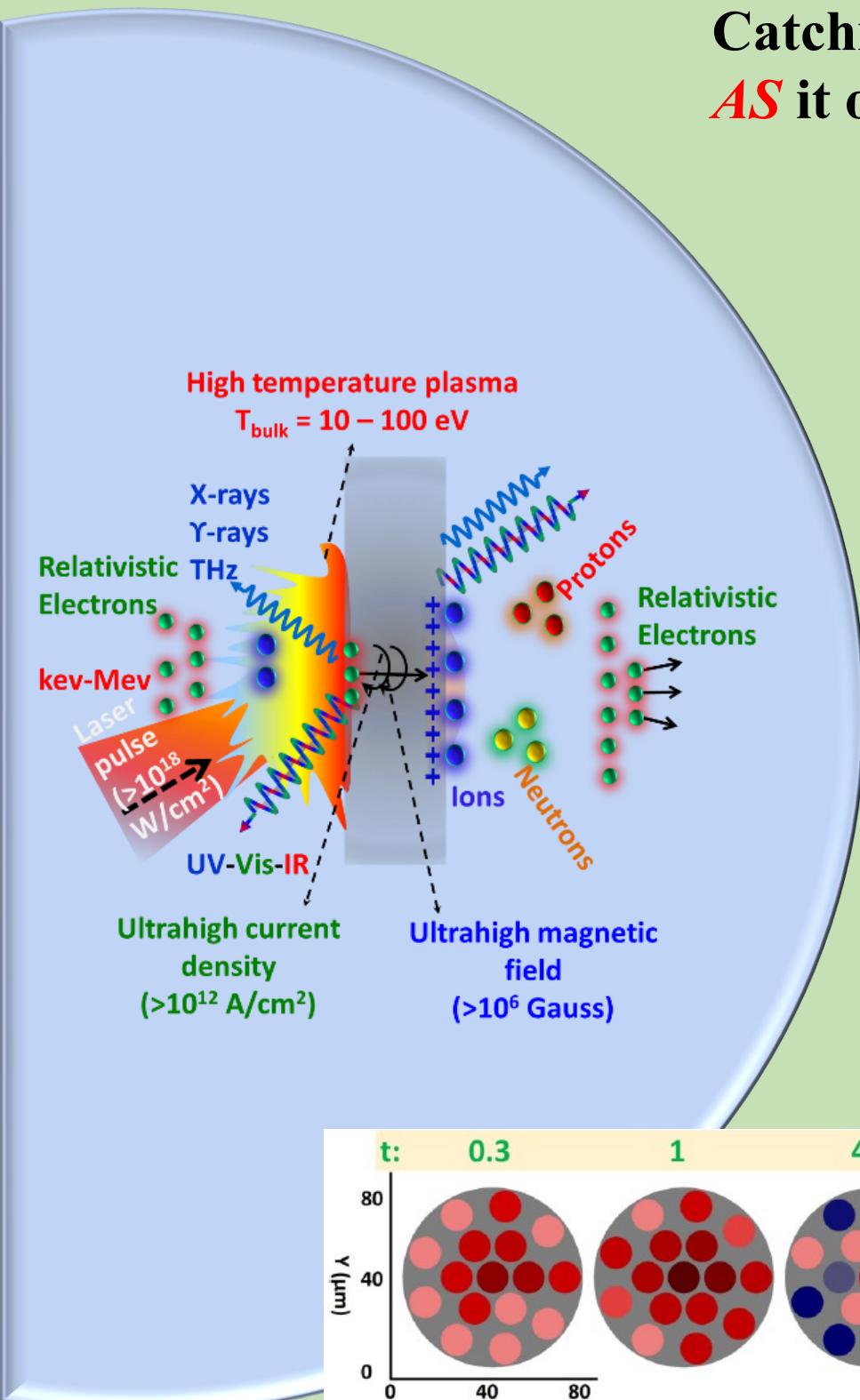


Catching the Ultrafast Motion of Plasma – *AS* it occurs, *WHERE* it occurs

Dr Amit D. Lad

Department of Nuclear and Atomic Physics
Tata Institute of Fundamental Research

Ultrashort (femtosecond), ultra-intense ($>10^{18}$ W/cm²) laser pulses impinging on a solid can produce hot *and* dense plasma. Its rapid, turbulent evolution poses many difficulties in its measurement. The lab has recently developed 2-D techniques to see the ‘face’ of such a plasma as it moves, brightens and dims in cyclical fashion. In this talk, Dr. Lad will speak about the challenges faced and the innovations made to catch these events on femtosecond timescales *simultaneous with* micron spatial scales.



Amid Lad obtained his Ph.D. in Physics from Savitribai Phule Pune University in 2009 and currently, he leads TIFR 150 TW Laser Facility. He has more than 80 publications in international journals and 30 invited talks at international and national conferences. He is an Infosys-TIFR Fellow and has been awarded Dr. Parvez Guzdar Young Scientist Award (2014) and Dr. R. K. Bhalla Young Scientist Award (2008).

March 3, 2023 at 4 p.m. in AG-66, TIFR, Mumbai

YouTube live: <https://youtube.com/live/ZgBWh2pUKbY?feature=share>