

What all can intense light do?

Prof. Tajima is well known as the inventor of laser electron acceleration. A brilliant physicist, he is interested in a wide range of areas from fundamental physics to plasma physics and even medicine. He is the Chair of the International Committee for Ultrahigh Intensity Lasers (ICUIL) and the Deputy Director of IZEST (International Center for Zetta- Exawatt Science and Technology). His recent awards include the 2013 Einstein Professorship of Chinese Academy of Sciences, the Blaise Pascal Chair as well as the Nishina Memorial Prize



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Laser was invented five decades ago and the laser intensity is exponentiating for over three decades. Why did it do so and how will it do in the future? What can it do for us? The intense laser enabled laser wakefield acceleration of electrons for GeV over cm. Such beams in turn serve as excellent compact drivers of various brilliant radiation sources relevant for fundamental physics, materials and life sciences, and medical applications. It is a candidate for future high energy colliders. A recent development makes a possibility to go beyond this as a crystal wakefield accelerator for TeV on a tiny chip. Such an accelerator relates our research endeavor to high energy cosmic rays and cosmos makeup in extreme energies.

Monday, October 20 at 4 p.m.

Homi Bhabha Auditorium, TIFR

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