

## **Europe Asia collaboration On High Energy Density Physics**

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The rapid advance in high-power laser technology enables researchers to generate and observe extremely hot and high-density plasmas in the laboratory (High Energy Density Physics). In the last 15 years, the PPCF Dendy Europe-Asia award recipients performed strong collaboration on equation-of-state measurements and all related thermodynamic parameters in highly compressed matter, and laboratory investigations of space/astrophysical phenomena contributing to several big challenges in plasma physics.

During this talk, we will focus on a very few recent advances such as planetary physics, Rayleigh-Taylor instabilities in supernovae explosions and Kelvin-Helmholtz instability in collisionless counterstreaming plasmas.