



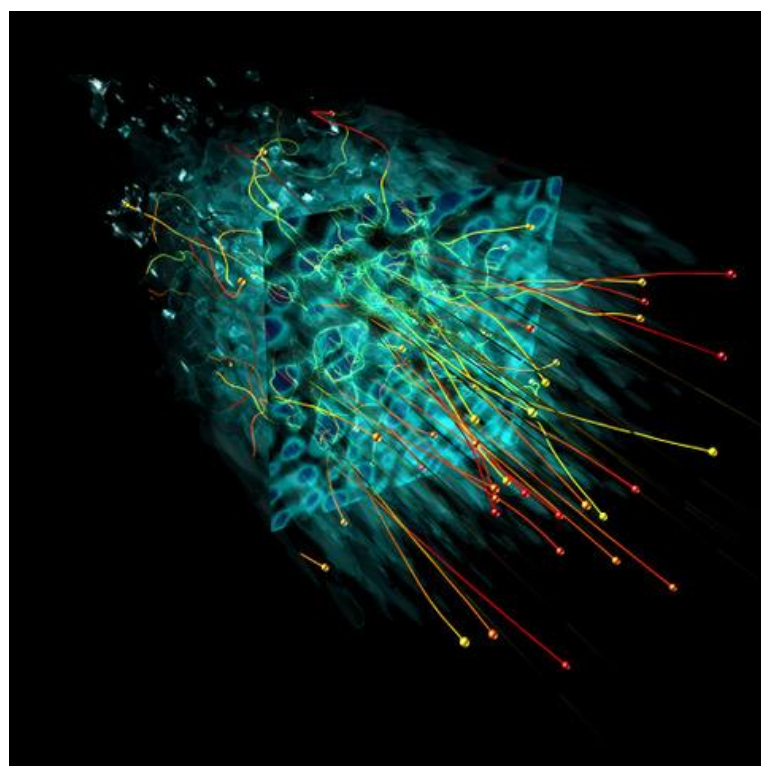
VIDEO Colloquium: Particle acceleration in shocks: from simulations to observations via laboratory experiments.

Tuesday, 24 November, 2020

Webcast 16:45 h

Frederico Fiuza (SLAC)

Collisionless shocks are ubiquitous in high-energy astrophysical environments, from supernova remnants to gamma-ray bursts. These shocks are commonly inferred to amplify magnetic fields and accelerate nonthermal radiating particles and cosmic rays. While the general theory of diffusive shock acceleration is well established, the plasma processes that control magnetic field amplification and particle injection remain long-standing open questions that affect the observational manifestations of shocks. I will discuss how the fast progress in computational and experimental capabilities is creating unique opportunities to push the boundaries of our understanding of particle acceleration in shocks by allowing the detailed kinetic modeling of different plasma processes and controlled laboratory experiments that can validate these models.



Zoom connection details:

Meeting ID: 996 1652 8733

Meeting Password: 733220