



ID de Contribution: 114

Type: **Ordinary**

Neutrinos probe supernova dynamics

mardi 18 mars 2014 09:30 (15 minutes)

Despite their extremely weak interactions, neutrinos are crucial to the dynamics of the most spectacular events in our galaxy: the deaths of massive stars in violent supernova explosions. In the delayed explosion scenario of core-collapse supernovae, neutrinos play a fundamental role reviving the explosion and carry imprints of the supernova hydrodynamics. Neutrino signal variations from first three-dimensional hydrodynamical simulations as well as their detection perspectives will be discussed. I will also talk about perspectives on what we could learn from such a measurement concerning the physics in the supernova core and the explosion mechanism.

Auteur principal: Dr TAMBORRA, Irene (GRAPPA Institute, University of Amsterdam)

Orateur: Dr TAMBORRA, Irene (GRAPPA Institute, University of Amsterdam)

Classification de Session: Astrophysical neutrinos - Dark Matter

Classification de thématique: Theory