Channeling 2014



Contribution ID: 191 Type: Round Table

Propagation of ultra-intense laser pulses in plasma channels and related phenomena

Wednesday, 8 October 2014 18:30 (1h 30m)

The propagation of super-intense and ultra-short laser pulses in plasmas is a main concern in several applications of the laser-plasma interactions, from ICF to HEP. During the propagation in the plasma the light beam deeply changes its parameters, due to the onset of non-linear effects, among them the relativistic regime of the electron quivering motion. These extreme conditions are suitable for the electron acceleration in high field gradient, opening to the realization of compact secondary sources of X-gamma rays. Colleagues from the major laser infrastructures and research centers (CEA, RAL, Ecole Polytechnique, PALS, ...) participating to the Round Table will consider present and future links between the different applications of such physical phenomena.

Primary author: GIULIETTI, Danilo (PI)

Presenter: GIULIETTI, Danilo (PI)

Session Classification: Round Table