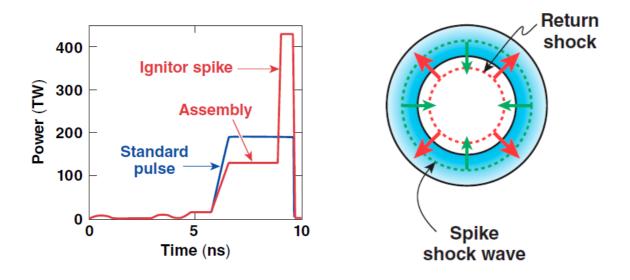
Availability of Ph.D. thesis "Physics of Shock Ignition"

Shock ignition is a rather novel approach to inertial confinement fusion, which relies on separating the compression and ignition phases of target implosion. Ignition is triggered by using an intense laser spike at the end of the compression phase, which generates a strong spherical shock converging at target center and increasing the fuel temperature to ignition condition.

The work will concern the study of the physical unknowns related to shock ignition, in particular the generation of hot electrons and their impact on laser-target coupling and strong shock generation.

The thesis will have an experimental part (experiments realized in European or overseas Large Scale Laser facilities) and theoretical/numerical parts, which will also include the training to using hydrodynamics codes.



The thesis is supported 50% by the Region Aquitaine and 50% by the EUROFUSION Enabling Research Project: Preparation and Realization of European Shock Ignition Experiments. It will take place at the CELIA laboratory of the University of Bordeaux, France.

Please contact the supervisor Prof. Dimitri Batani, University of Bordeaux, France email: dimitri.batani@u-bordeaux.fr