

Service d'Astrophysique
SÉMINAIRE

Jeudi 16/05/2013, 11h00

CEA Saclay, Orme des Merisiers Bat 713, salle de séminaires Galilée

**TURBULENCE DISSIPATION AND THE CHEMISTRY
OF THE DIFFUSE ISM**

LERMA/ENS Paris

Large-scale motions in galaxies (supernovae explosions, galaxy collisions, galactic shear etc.) generate turbulence, which allows a fraction of the available kinetic energy to cascade down to small scales before it is dissipated. This dissipation can take the form of viscous, Ohmic or ambipolar friction and may assume various geometrical shapes (shocks, current sheets, vortices, filaments...). The local heating this generates may impact the chemical composition of the gas by opening routes for a warm chemistry otherwise blocked in the cold gas.

I will first focus on the impact of shocks on the production and excitation of molecules and how this helps us to interpret observations.

I will then present ongoing work to characterize the structure and dynamics of dissipation coupled to chemistry in the interstellar medium.

Le cafe sera servi 10 minutes avant

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http://irfu.cea.fr/Phocea/Vie_des_labos/Seminaires/index.php