

Ultrafast phenomena in the condensed phase with emerging light sources, from THz to X-ray

1. Organisateurs (avec affiliation, usuellement 2 ou 3 personnes) :

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2. Parrainage ou lien avec des sociétés savantes, des GDR ou autres structures :

Parrainage : GDR Ultrafast Phenomena

3. Résumé de la thématique du mini-colloque :

The emergence of highly performing light sources, from large scale facilities (such as FEL) to laboratory scale experiments, has allowed us to access out-of-equilibrium properties of matter on microscopic scale with unprecedented time resolution. These sources provide new tools, covering a large wavelength range from THz to X-ray that can monitor multiscale dynamical processes at picosecond, femtosecond or even attosecond timescales, where charge dynamics is observed on the atomic length scale.

This mini-workshop aims at bringing together specialists of ultrafast science to establish the current state-of-the-art of the community. The topics to be discussed in the workshop will include, but are not limited to exciton, phonon, spin dynamics, phase transitions, topological, correlated, magnetic or 2D materials, angularly resolved photoemission, transient absorption, use of secondary sources (such as high order harmonic generation), FEL experiments and attosecond science.