

## Séminaire **SOLEIL**

# Spectroscopy of unconventional solids by Infrared synchrotron radiation

**Paolo CALVANI**

(*Dipartimento di Fisica, Università di Roma La Sapienza, Roma, Italy*)

**Invité par Pascale ROY**

**Lundi 24 septembre à 14h00  
Grand Amphi SOLEIL**

## Séminaires

Recent infrared experiments on solids with unconventional properties, which span from the high-Tc cuprates to superconducting diamond, from manganites with charge order to the topological insulators, are briefly reviewed.

It will be shown that many of those measurements take a great advantage from the use of a broad-band, brilliant source like infrared synchrotron radiation, especially in the far-infrared and Terahertz ranges.

Among those experiments one can recall the determinations of superconducting gaps in low-Tc materials, the observation of Josephson plasma resonances, the detection of collective excitations of charge density waves; the observation of insulator-to-metal transitions induced by high pressure in diamond-anvil cells; the study of unexpected effects at the interface between different oxides, by use of ellipsometry and of spectroscopy at grazing angles.



Ce séminaire sera suivi d'une pause-café



**Formalités d'entrée :** accès libre dans l'amphi du Pavillon d'Accueil. Si la manifestation a lieu dans le Grand Amphi SOLEIL du Bâtiment Central, merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).

SYNCHROTRON SOLEIL

Division Expériences - L'Orme des merisiers - Saint-Aubin - BP 48 – 91192 GIF S/YVETTE Cedex

<http://www.synchrotron-soleil.fr/portal/page/portal/Soleil/ToutesActualites>

Secrétariat Division Expériences : [sandrine.vasseur@synchrotron-soleil.fr](mailto:sandrine.vasseur@synchrotron-soleil.fr)