Recent advances in hard x-ray dichroisms

SEMINAIRE

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Development of the third generation synchrotron radiation sources has boosted X-ray spectroscopy, as illustrated by the discovery of a variety of new experimental techniques associated with the exploitation of the polarisation properties of x-rays. The detection of X-ray magnetic linear and circular dichroism in ferro-, ferri- and paramagnetic systems, the discovery of X-ray natural circular dichroism in gyrotropic single crystals as well as the observation of non-reciprocal X-ray linear dichroism and X-ray magneto-chiral dichroism in magnetoelectric systems are particularly interesting. In combination with sum rules these spectroscopies appear as remarkable tools to study fundamental properties of matter via various order parameters, e.g., spin and orbital moments, electric dipole moment, toroidal moments etc. In this talk we report on advanced instrumentation developed at the ESRF beam line ID12 which is dedicated to polarization dependent x-ray spectroscopy at photon energies above 2keV. Several examples have been selected to show the recent advances in polarization dependent x-ray spectroscopies.

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 piece d'identité (à échanger à l'accueil contre un badge d'accès)

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