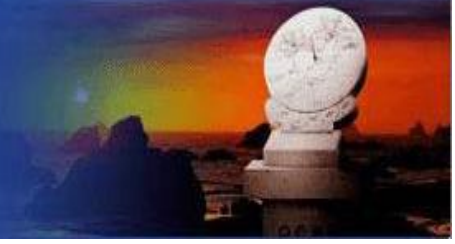




復旦大學

Fudan University



復旦大學物理系物質科學報告

Physics Department Colloquium

Detecting Chiral magnetic effect by lattice dynamics

Prof. Xi Dai

Institute of Physics, CAS

In the present paper, we propose that the chiral magnetic effect, the direct consequence of the presence of Weyl points in the band structure, can be detected by its coupling to certain phonon modes, which behave like pseudo scalar under point group transformations. Such coupling can generate resonance between intrinsic plasmon oscillation and the corresponding phonon modes, leading to dramatic modification of the optical response by the external magnetic field, which provides a new way to study chiral magnetic effect by optical measurements.

EXPERTISE

Density Functional Theory & local density approximation;
Dynamic Mean Field Theory;
Topological Materials;
Quantum anomalous Hall effect & Quantum spin Hall effect;
Strongly Correlated Systems;
Rare Earth and Actinides compounds

APPOINTMENTS

Professor	Institute of Physics	CAS, 2007-present
Research assistant professor	Hong Kong University	2004-2007
Postdoc	Rutgers University	2002-2004
Postdoc	Boston College	2001-2002
Postdoc	Hong Kong University of Science and Technology	1999-2001

Time: 2:00pm, Tuesday, 2016.9.27

Location: Physics Building, Room 221B

(Cookies and coffee are served from 1:30 pm)