TECHNISCHE UNIVERSITÄT DRESDEN

Institut für Festkörper- und Materialphysik

IFMP Institut für Festkörper- & Materialphysik

IFMP Seminar

Date Monday, December 02, 2024, at 14:50

REC/C213

BigBlueButton: https://bbb.tu-dresden.de/b/dar-mbs-me8-gsc

Speaker **Cintli Aguilar Maldonado**
HZB Berlin

Title **Structure and Magnetic Properties of the Maple-Leaf-Lattice Antiferromagnet Ho_3ScO_6**

Abstract Ho_3ScO_6 harbours a frustrated maple-leaf lattice. It crystallizes in the Mg_3TeO_6-type structure, and has a centrosymmetric trigonal space group ($R\bar{3}$). This system contains stacked layers of magnetic rings along the *c* axis consisting of six magnetic Ho^{3+} ions forming Ho hexagons, which are connected into a 2-dimensional network by equilateral and isosceles triangles to form a rare example of a maple-leaf lattice. Long-range magnetic order is reached below T_N = 4.1 K with a 120° spin arrangement on the equilateral triangles resulting in a positive-vector-chirality ground-state configuration.

Host: D. Peets

Briefadresse
TU Dresden,
01062 Dresden

Paketadresse
TU Dresden,
Helmholtzstraße 10,
01069 Dresden

Internet
www.tu-dresden.de

Die TU Dresden ist Partnerin im Netzwerk DRESDEN-concept

DRESDEN concept