



# EINLADUNG zum IFP-SEMINAR

Thema: **Unified picture for the colossal thermopower compound FeSb<sub>2</sub>**

Vortragender: **Marco Battiato**,  
Institut für Festkörperphysik, TU Wien

Host: Karsten Held

Termin: **Mittwoch, 14. 01. 2015, 16:00 Uhr**

Ort: TU Wien  
Freihaus Seminarraum 138B, Turm C, 7. OG (rote Leitfarbe)  
Wiedner Hauptstraße 8-10, 1040 Wien

## Abstract:

We identify the driving mechanism of the gigantic Seebeck coefficient in FeSb<sub>2</sub> as the phonon-drag effect associated with in-gap states that we demonstrate to derive from excess iron. We model electronic and thermoelectric transport coefficients and explain the so far ill-understood correlation of maxima and inflection points in different response functions. Our scenario is of relevance for attempts to harvest the powerfactor of FeSb<sub>2</sub>.