



# EINLADUNG zum IFP-SEMINAR

## Novel properties of Materials at/ near a metal insulator transition

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Host: Ernst Bauer  
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### Abstract:

In strongly correlated electron systems, the metal insulator (MI) transition is driven by strong correlation effects associated with electron-electron interactions and the interplay between the charge, spin and orbital degrees of freedom. These are strongly coupled to the lattice and consequently can be tuned by external pressure.

In this contribution, I will present and discuss recent results on the effect of pressure on the magnetic, transport, and structural properties of some selected systems of this class of materials ( $\text{RNiO}_3$ ,  $\text{GaNb}_4\text{S}_8$ , and  $\text{SnO}$ ) and shown how such experimental results provide new insight in understanding the interplay between these degrees of freedom and their impact on the formation of anomalous ground states at high pressure.