

**Dirty magnets:
From fractional moments to cluster spin glasses**

M. Vojta¹

¹*Technische Universität Dresden, Germany*

Quantum magnets under the influence of quenched disorder display a plethora of non-trivial phenomena. The talk will give a partial overview of the field, focussing (i) on single-impurity effects where the impurity may be used as a local probe of host properties and (ii) on effects of a finite concentration of defects which modify bulk properties. Specific examples to be discussed include fractional defect moments in frustrated magnets, the magnon spectrum of disordered magnets near quantum criticality, and the formation of cluster spin-glass phases in doped cobaltates and iridates.