

Theoriekolloquium

Am **30. November 2017** um **14.15 Uhr** in **W2 1-143** hält

Herr Prof. Dr. Jürgen Schnack (Bielefeld)

einen Vortrag mit dem Titel

Yes, we can! Advanced many-body quantum methods for magnetic molecules

Many interesting quantum mechanical problems could in principle be solved by matrix diagonalization. But although computers grow bigger and bigger - and also the speaker fancies the latest and biggest - they cannot cope with the matrix sizes of interacting many-body quantum systems. One could think that this puts an end to exact quantum mechanics, but besides using symmetries methods have been developed which create the relevant subspace of a quantum problem. The essence of these methods will be introduced and applications to quantum spin problems such as given by magnetic molecules will be discussed. The discussion of theory development is accompanied by applications as for instance the magneto caloric effect.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Martin Holthaus