
Seminar

Quantum criticality and BEC scenario in quasi 1-D Antiferromagnets – signatures in the spin dynamics

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Low dimensional quantum antiferromagnets share excellent test-beds to study field induced exotic phases, e.g. Bose-Einstein condensation (BEC), magnetization plateaux, and the related Quantum Critical phenomenon. They are governed by the low energy spin dynamics and the physics of hard-core bosons. In this talk I will use our NMR results to mainly focus on the complex but universal physics near the vicinity of Quantum Critical Points and the BEC scenario in one of these low dimensional quantum magnets. The universality and scaling behaviour of the spin dynamics in two microscopically different quantum magnets - DTN and BPCB in 1 D regime, and the critical behaviour and BEC scenario in the 3D regime of DTN will be discussed.

Wednesday, Oct 8th 2014

4:00 PM (Tea/Coffee at 3:30 PM)

Seminar Hall, TCIS