Physics Colloquium

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Spin liquid: classical or quantum?

Imagine a magnetic material made off microscopic magnetic needles that cannot decide which way to point, even when cooled down to very low temperatures. Such a behaviour can arise when the atomic needles, the spins, are attracted to each other in certain directions but frustrated by other competing attractions in other directions.

In this talk, I will give a broad overview of this flourishing field of frustrated magnetism, discuss some of the canonical examples of the so-called classical and quantum spin liquids, and highlight some of their key manifestations using simple cartoon pictures.

Venue: small lecture hall. Universität Leipzig, Faculty of Physics and Earth Sciences 04103 Leipzig, Linnéstraße 5.

Everyone is welcome to a reception with coffee, drinks and cookies in the Aula following the talk.

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