

Spin Liquids and Related Topics

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I will give a short review on spin liquids and several related topics.

Spin liquids are the systems that lack conventional magnetic long-range orders even at very low and zero temperatures, and intensive theoretical and experimental studies have been performed in the last few decades. There are two factors which destabilize naively expected magnetic orders: quantum fluctuations and geometrical frustrations. In my review, I will explain the basic ideas and concepts of spin liquids and talk about which kind of behaviors are expected in physical properties in these interesting exotic systems.

I will also discuss shortly about emerging novel orders related to spin liquids, for example, spin nematic order.