Frustration, quantum magnetism and spin liquids

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While spin chains constitute the natural playground for quantum magnetism, extending this physics to higher dimensions has turned out to be an enduring and rewarding quest with the discovery of many novel exotic states. One emblematic example is the antiferromagnetic Heisenberg model for S=1/2 spins on the kagome lattice made of corner sharing triangles. Despite it seemingly simple nature, this highly frustrated spin model continues to challenge theory and material science to find good material realizations. I will discuss recent advances in the field from an experimental perspective.