

# Valence bond breaking and re-arrangement in YbMgGaO<sub>4</sub>

*Wednesday, 26 June 2019 11:00 (30 minutes)*

Rare-earth based triangular antiferromagnets provide a novel playground for frustrated magnetism and quantum spin liquid behavior of spin-orbit coupled moments. YbMgGaO<sub>4</sub> features spin-orbit moments from a Kramers doublet, which remain fluctuating down to very low temperatures. We discuss recent inelastic neutron scattering experiments which point at valence bond excitations [1,2].

[1] Y. Li et al., Nat. Commun. 8, 15814 (2017).

[2] Y. Li et al., Phys. Rev. Lett. 122, 137201 (2019)

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