



Thursday, Oct 21st 2021 - 15:00
Hybrid: SR I, II, III and Zoom

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Controlling magnetism in 2D

The recently emerged atomically thin magnetic materials provide unprecedented opportunities to study magnetism in the 2D limit and to effectively control it for device applications. In particular, CrI₃ is a model Ising ferromagnet with intriguing layer-dependent magnetic properties: whereas a CrI₃ monolayer is a ferromagnet, a natural bilayer is an antiferromagnet with two ferromagnetic monolayers coupled antiferromagnetically. In this talk, I will present our recent experiments on controlling the interlayer magnetic order in CrI₃ by various perturbations, including electric fields, electrostatic doping and stacking order, and discuss the underlying mechanisms for the observed effects.

Host: Angel Rubio, Andrea Cavalleri

