Strains effect on the magnetism of ferromagnetic/ferroelectric multilayers.

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In the last couple of years, an important effort has been made to combine ferromagnetic and ferroelectric materials in order to develop multifunctional nano-devices with properties controlled either by strains, magnetic or electric fields. In particular, perovskite-type oxides are being extensively studied due to their rich variety of physical properties and thus high potential for applications. In this talk, I will review our work related to the study of strain-induced effects on the magnetic properties of oxides layers and recent results obtained on ferromagnetic/ferroelectric multilayers. The magnetic order and anisotropies, coercivities and interlayer coupling of these structures will be discussed.