## Abstract Submitted for the MAR09 Meeting of The American Physical Society

Magnetism and magnetic anisotropies of small organic molecules<sup>1</sup> JAIME FERRER, DIEGO CARRASCAL, LUCAS FERNANDEZ SEIVANE, Universidad de Oviedo / CINN — The ability to enhance and tailor the magnetism of small atomic cluster and molecules will determine whether nanospintronics can be used as a storage technology. We present here our ab initio studies on the magnetism of small organic molecules containing transition metal atoms. We focus specially on 5d atoms like gold, platinum and iridium. These have a large spin-orbit interaction, which generates large magnetic anisotropies in small atomic clusters[1]. [1] L. Fernandez Seivane and J. Ferrer, Phys. Rev. Lett. 99, 183401 (2007).

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