

## DOTTORATO DI RICERCA SCIENZA E TECNOLOGIA PER LA FISICA E LA GEOLOGIA

## **Short Course on**

## **NANOMAGNETISM**

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## **TOPICS, DATES AND LOCATION**

- ✓ Magnetic properties of materials: diamagnetism, paramagnetism, exchange interaction, band ferromagnetism, 9 April, h. 11,30, aula 12, Dept. of Engineering
- ✓ Ferromagnetic materials, magnetostatics, anisotropy, magnetic domains, 10 April, h. 11, Sala riunioni IV piano, Dept. of Physics
- ✓ Magnetism of Micro and Nano Systems: energy formulation and thermodynamics, 13 April,
   h. 14,30, aula 12, Dept. of Engineering
- ✓ Micromagntetic Model and LLG Dynamic Equation, 14 April, h. 15, Sala riunioni IV piano, Dept. of Physics
- ✓ Uniformly magnetized particles: the Macro-spin description, 15 April, h. 8,45, aula 10, Dept. of Engineering
- ✓ Non-uniform Magnetization Dynamics in thin-films reversal processes, 15 April, h. 15, Sala riunioni IV piano, Dept. of Physics
- ✓ Spin-transfer torque, principles and applications, **16 April**, **h. 11,30**, aula 12, Dept. of Engineering
- ✓ Spin waves in thin films, 16 April, h. 15, Sala riunioni IV piano, Dept. of Physics
- ✓ Magnonic crystals and Magnonics, 17 April, h. 15, Sala riunioni IV piano, Dept. of Physics
- ✓ Experimental techniques (visit to the BLS and MOKE laboratories), 21 April, h. 15, Sala riunioni IV piano, Dept. of Physics