Laser Seminar
Monday, March 27, 2017

Time	**14.00**
Location	ETH Zurich, Hönggerberg, HPF G6
Speaker	Erwan Terrier, University of Strasbourg
Title	**Ultrafast demagnetization in iron oxide nanostructures**
Abstract	Here we study the ultrafast spin and charge dynamics in iron oxides using time-resolved magneto-optical Faraday spectroscopy. First, we will focuse on the short-time range in magnetite and maghemite nanoparticles. Clear differences are observed between both samples notably an acceleration of the demagnetization time in maghemite comparing to magnetite. Exchange interactions seem to be involved in this phenomenon. The second part of the talk shows the possibility to characterize dynamically the Verwey transition in a thin film. Ultrafast magnetization dynamic shows a temperature dependence of precession motion: huge modifications of oscillations are visible on both side of the Verwey temperature, corresponding to a typical anisotropy change of this transition.
Host	Steve Johnson, Ultrafast Dynamics, IQE
More Info	http://www.fastlab.ethz.ch/laser-seminar.html

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