

USF NEXUS INITIATIVE 2019 AWARD RECIPIENT

Dario Arena

Exploring Ultrafast Spin Dynamics in Ferrimagnets with a University-Based Laser System

We are quickly moving into the Communications Age, where high-speed communications between digital devices will be of paramount importance. Such digital communication demands high-frequency electronics, which have a long history of incorporating advanced magnetic materials. The USF Nexus Initiative grant will support ultrafast-laser based studies of advanced magnetic materials. Materials will be grown at the USF Physics Department and studied at the femtosecond, high energy HELIOS laser system at the Uppsala University (Sweden). The UNI grant will promote exchanges between USF Physics and Uppsala and will include visits by both the HELIOS experimentalists and theorists working on atomistic spin dynamics theory.

Partnerships:

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