

Interaction of spin waves with magnetic microstructures

Spin waves are proposed as a possible substitute to modern day electronics. Recently, a lot of scientific work is dedicated to the interaction of spin waves with magnetic microstructures: For example, the tunable excitation of spin waves by magnetic vortex cores by a homogeneous microwave excitation have been studied [1]. In this thesis, micromagnetic simulations based on finite differences should be applied to gain a deeper understanding of the interaction of spin waves and magnetic microstructures. There are no prerequisites to this thesis. During the thesis, Matlab® *will* be used for data evaluation purposes. Simple programming skills *will* be acquired during the thesis.

[1] S. Wintz et al., Nature Nanotechnology 11, 948–953 (2016)

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