# On-line SPICE-SPIN+X Seminars

**Wednesday, 3rd June 2020, 15:00 (CET)**

**The seminar will be via Zoom (Meeting ID: 83195210959) and live streamed in the SPICE YouTube Channel.**


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## Terahertz spin transport in magnetic nanostructures


Transport of spins is often driven by heat gradients and electric fields. To probe the initial elementary steps which lead to the formation of spin currents, we need to launch and measure transport on femtosecond time scales. This goal is achieved by employing both ultrashort optical and terahertz electromagnetic pulses. We illustrate our experimental approach by several examples including the spin Seebeck effect (see figure) and anisotropic magnetoresistance.


**References**


[1] Seifert *et al*., Nature Comm. **9**, Article number: 2899 (2018)
[2] Seifert *et al*., J. Phys. D: Appl. Phys. **51**, 364003 (2018)