

On-line SPICE-SPIN+X Seminars



Wednesday, 12th May 2021, 15:00 (German Time)

The seminar will be via Zoom ([Meeting ID: 813 0339 1352](#)) and live streamed in the SPICE YouTube Channel.



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Spin dynamics: the Landau-Lifshitz equation and beyond

Our understanding of spin dynamics rests on equations of motion, the most famous one being the Landau-Lifshitz equation. In this talk I will give a short introduction in modern, microscopic interpretations of this equation and how it is linked to other approaches in the spirit of multi-scale modelling. Then I will discuss applications of the Landau-Lifshitz equation in the context of ultrafast spin dynamics, extensions of this equation to include new types of dynamics as, e.g., nutation and field-derivative torques, and finally, present an outlook towards spin-phonon coupling and the ultrafast transfer of spin angular momentum into the lattice.