

On-line SPICE-SPIN+X Seminars



Wednesday, 1st September 2021, 15:00 (German Time)

The seminar will be via Zoom ([Meeting ID: 876 5626 5313](#)) and live streamed in the SPICE YouTube Channel.



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Magnetic topological phases in dissipative systems

While magnetic systems have been extensively studied both from a fundamental physics perspective and as building blocks for a variety of applications, their topological properties, however, remain relatively unexplored due to their inherently dissipative nature.

I will start this talk by showing how the recent introduction of non-Hermitian topological classifications has opened up opportunities for engineering topological phases in magnetic systems, and I will present our first proposal of a non-Hermitian topological magnonic system, i.e., a realization of a SSH non-Hermitian model via a one-dimensional spin-torque oscillator array.

In the second part of this talk, I will discuss the conditions under which magnetic insulating systems can host one of the most striking non-Hermitian phenomena with no Hermitian counterpart, i.e., the skin effect, which underlies the breakdown of the bulk-edge correspondence.