

FUNLAYERS Summer School on the Characterization of 2D-Materials using Synchrotron Light



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Introduction to FUNLAYERS and introduction to the Theory of magnetic 2D-Materials

Tuesday, 1 July 2025 09:35 (45 minutes)

In this lecture we will discuss: 1) Why are 2D-magnetic materials different (basic concepts on dimensionality and magnetism, absence of long-range magnetic order in 1D, restrictions in 2D, the role of magnetic anisotropy"; 2) What are magnons, why are they particularly important in 2D, how to compute them, how to probe them with inelastic spectroscopy; 3) Magnetism vs Quantum magnetism, and its role in (quantum) information processing.

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