

# On-line SPICE-SPIN+X Seminars



**Wednesday, 16th November 2022, 15:00 (CET)**

The seminar will be via Zoom ([Meeting ID: 889 5382 9013](#)) and live streamed in the SPICE YouTube Channel.

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## **Towards a "complete" picture of ultrafast dynamics in the 2D ferromagnet FGT**



Two dimensional materials have been the focus of intense study in recent years, with extensive effort invested in transition metal dichalcogenides. A recent addition to this is the study of 2D magnetic materials. Here we focus on one such ferromagnetic material: Fe<sub>3</sub>GeTe<sub>2</sub>. We present an overview of its ultrafast response to photoexcitation using three time-resolved probes: angle resolved photoemission (ARPES), X-ray magnetic circular dichroism (XMCD), and ultrafast electron diffraction (UED). These reflect the response of different material degrees of freedom, namely the carriers, the spins and the phonons. I will then focus primarily on the study of lattice dynamics using UED.