



Institute of Physics of the
Czech Academy of Sciences

SEMINAR

22. 3. 2022 | 13:30-15:00

Lecture hall, Na Slovance 2

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Magnonics: Of Spins and Waves

Spin waves are actively explored as signal and data carriers within future devices of magnonics, spintronics and their spinouts across discipline boundaries. However, even best-laid device schemes often go awry when faced with realities of physics of spin waves: the non-linearity and anisotropy of the magnonic dispersion relation, the non-locality and chirality of spin waves and their coupling fields, and the generic complexity of micromagnetics and associated graded magnonic landscapes. In my talk, I will present some illustrations of such exotic wave phenomena observable in magnonics. I will also argue that, once understood, this awryness of spin waves could promise remarkable benefits for both existing and future device concepts within magnonics and beyond.

Garant Ján Lančok
vedoucí oddělení 28