



IFMP Seminar

Date Monday, June 29, 2026, at 14:50

REC/C213

Zoom: 633 2801 2201, Passcode: IFMP2025-6
(availability not guaranteed!)

Speaker **Amit Finkler**

Weizmann Institute, Rehovot, Israel

Title **Magnetic resonance imaging on the nanoscale —
detecting coherent and incoherent sources**

Abstract I will present our effort towards nanoscale magnetic resonance imaging (nanoMRI) using a scanning probe approach pioneered in our group and explain how this technique can differentiate between two electron spins separated a few nm from each other in the same molecule. In addition, I will also introduce a noise spectroscopy method which allows us to differentiate, between different spin bath environments based on the memory (Markovianity) and dynamics (stationarity) of the noise spectrum. Together, the two examples, along with other methodologies developed by our group and by others, move us closer towards the goal of measuring the magnetic spectrum of a single molecule.

Host: A. Singha