

Seminar

Designing pulsed DNP experiments – Bridging DNP and MAS solid-state NMR

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I will address the design of pulsed experiments in magnetic resonance with focus on pulsed dynamic nuclear polarisation (DNP) for sensitivity enhanced NMR and quantum sensing. Focus will be efficient control of linear and bilinear fields in effective Hamiltonians to enable design of broadband DNP experiments by non-linear optimisation and optimal control. The talk will cover basic theory, numerical optimisation, and experimental data with DNP pulse sequences presenting 100 MHz electron-spin bandwidth.

Friday, Jun 20th 2025

11:30 Hrs (Tea / Coffee 11:15 Hrs)

Seminar Hall, TIFRH