

## (Ctiff Tata Institute of Fundamental Research

Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500 046

#### **Internal Seminar**

## Solid-state NMR strategies towards speed, resolution and geometry

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Solid-state NMR is a flexible and powerful technique for the elucidation of geometry and dynamics information on a variety of samples. However, there is still a need to overcome sensitivity and resolution issues as most of the solid-state samples yield broad NMR spectra due to anisotropic interactions such dipole-dipole as couplings. However, such interactions also contain structural information and need to be reintroduced during selected time periods. The talk addresses the design of efficient decoupling and recoupling sequences in solid-state NMR along with the necessity to carry out multidimensional experiments in a short span of time. The use of three approaches have been made in order to achieve these leading to higher resolution, sensitivity and reduction in experiment duration.

Wednesday, Jul 12<sup>th</sup> 2023

11:30 AM

CR-4, TIFRH