

Colloquium

Adventures on the fringes of magnetic resonance

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Our research group in Southampton explores nuclear magnetic resonance (NMR) and related areas. We are mainly interested in topics somewhat out of the mainstream, such as the role of spin isomers in magnetic resonance, the dynamics of spin systems far from equilibrium, including hyperpolarized spin systems, NMR in ultralow magnetic fields, long-lived spin states which are protected against common relaxation mechanisms, the role of permutation symmetry and geometric phases in magnetic resonance phenomena, and the properties of molecules encapsulated in nano-scale cavities, where spatial quantum mechanics is entangled with the spin quantum mechanics.

Some of these topics involve spectroscopies that are quite distant from mainstream magnetic resonance, such as neutron scattering and terahertz spectroscopy. A selection of these topics will be discussed in this talk.

Wednesday, Nov 30th 2022

4:00 PM (Tea/Coffee at 3:45 PM)

Auditorium, TIFR-H