W2S Seminar
(Webinar series on Spintronics)

Controlling and probing of spins

Speaker:
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Via
Zoom

Abstract

Intense laser field induced ultrafast quenching of magnetic order and associative ballistic superdiffusive spin transport process in the ferromagnets/heavy metal has drawn the attention of the spintronic and photonic community to realize the ultra-fast Opto-spintronic devices. In my talk, I will first discuss the direct and indirect spin Hall effect in detail, which play crucial role for generation of terahertz photons. Thereafter, I will discuss the basics of the Femto-magnetism and laser field induced quenching of the ferromagnetic ordering and ultrafast super-diffusion process, resulting terahertz photons. At the end of the talk, I will discuss the different schemes to reverse the phase of emitted terahertz radiation by switching of the direction of terahertz spin current, much needed for ever-faster and low-loss Opto-spintronics devices.

If interested to attend then please visit https://www.niser.ac.in/w2s-seminar/index.php