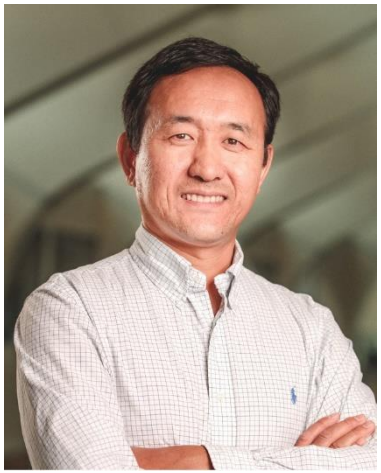
W2S Seminar
(Webinar series on Spintronics)



Electrical Switching of Antiferromagnetic Spins in Pt/Fe_2O_3 Bilayers

Speaker:
Prof. Fengyuan Yang
The Ohio State University
Columbus, Ohio, USA

Date and time:
05.08.2021 at
8.00 pm IST
i.e. 4.30 pm CET

Abstract

The ability to manipulate antiferromagnetic (AF) moments is a key requirement for the emerging field of antiferromagnetic spintronics. We report the demonstration of non-decaying, step-like electrical switching of tri-state Néel order in $Pt/\alpha\text{-}Fe_2O_3$ bilayers. Our experimental data, together with Monte-Carlo simulations, reveal the clear mechanism of the switching behavior of $\alpha\text{-}Fe_2O_3$ Néel order among three stable states. This demonstration of electrical control of magnetic moments in AF insulator films will expand the scope of AF spintronics by leveraging the large family of AF insulators.

To attend the lecture please visit
Zoom link: https://us06web.zoom.us/j/92983411729

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