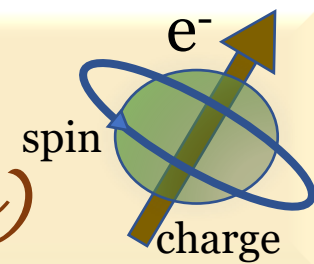




# W2S Seminar

(Webinar series on Spintronics)



## Designer Thin-film/Heterostructure of Quantum Materials and Emergent Phenomena

Speaker: Dr. Debakanta Samal  
Institute of Physics, Bhubaneswar,  
India

Date and time:  
10.09.2020 at  
6.30 pm  
Via  
Google meet

### Abstract

These days have witnessed a surge of attention in solid-state research to tailor and design synthetic materials by atomic-layer-engineering. Atomically engineered thin-films offer an exciting playground with the possibility to precisely manipulate the electronic and/or lattice degrees of freedom and assemble materials of near-arbitrary electronic, magnetic and structural properties. This enables to create new phases of electron matter and notable interfacial effects that can not be attained in parent bulk counterparts. In particular, heterostructures of quantum materials such as high- $T_c$  cuprates, iridates, and other electronically correlated and topological materials are fascinating and hold a lot of attention. Combining the power and possibilities of thin films design, this talk will cover some of our research work focusing on magnetic, superconducting, topological and dimensional/interfacial effect in complex oxide thin films and hybrid structures.

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