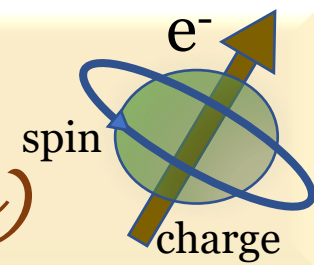




# W2S Seminar

(Webinar series on Spintronics)



## Coupling Topological Solitons in Hybrid Quantum Architectures

Speaker:

Prof. Christos PANAGOPOULOS  
Nanyang Technological University,  
Singapore

Date and time:

10.06.2021 at  
3.00 pm IST  
i.e. 11.30 am CET

### Abstract

We created hybrid materials in which superconductivity and magnetism interact through their particle-like topological excitations. Skyrmions inject flux tubes into superconductors, creating a bound pair of topological solitons. This flux forms antivortices, which modify the net magnetization of our materials and their flux dynamics. We also detect signatures of circulating spin-polarized supercurrents. The observed coupling of spin and flux topologies demonstrates the viability of such architectures for engineering nontrivial topology in quantum matter and a recipe to create and study topological superconductivity.

To attend the lecture please visit  
Zoom link: <https://zoom.us/j/94590446340>

Contact: Dr. Subhankar Bedanta (Convenor W2S)  
Email: [w2s-spintronics@niser.ac.in](mailto:w2s-spintronics@niser.ac.in)

For more information on W2S seminars please visit : <https://www.niser.ac.in/w2s-seminar/>