

## ICTS Seminar

Title : Topology, Superconductivity and Minimal Theoretical Models of Magic Angle Bilayer Graphene

Speaker : Ashvin Vishwanathan, Harvard University, USA

Date : Wednesday, 26 December 2018

Time : 11:00 AM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : The recent discovery of superconductivity and correlated insulators in twisted bilayer graphene tuned to a 'magic angle' points to the importance of correlation effects in this new solid state physics platform. An interesting and potentially crucial ingredient is band topology inherited from the Dirac fermion dispersion of graphene. We identify the 'fragile topology' of these systems, which places important constraints on minimal theoretical models that can provide a faithful description. We find that key aspects of the physics differ from previously studied correlated superconductors.