

ICTS Colloquium

Title : Applications of differential equations: what can we do with PDEs?

Speaker : Vishal Vasan, ICTS-TIFR, Bangalore

Date : Tuesday, January 22, 2019

Time : 11:30 AM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : In this talk, I'll introduce a number of problems arising in diverse areas such as water waves, Bose-Einstein condensates and the motion of particles suspended in a fluid. I'll attempt to show the connection between these diverse physical applications in terms of the the underlying mathematics. I hope to convince the listener of some non-obvious connections, the importance of working on diverse problems and the cross-pollination of good ideas. I will also emphasize the importance of mathematical structure that enables us to actually solve difficult and practical problems in engineering and geophysics. This talk is aimed at a broad scientific audience. Hence I will assume only minimal knowledge of PDEs (by design) and physics (by default!).