Title: Finite time blow-up for the hypodissipative Navier Stokes equations

Abstract:

In this talk, we will discuss recent results on the blow-up problem for classical solutions of the incompressible Euler equations with finite energy. Additionally, we will present the formation of singularities of classical solutions with finite energy of the forced fractional Navier Stokes equations where the dissipative term is given by $|\nabla|^{\alpha}$ for any $\alpha\in [0, \alpha_0)$ ($\alpha_0 = 0.09\cdots$).