Speaker: **Shrish Parmeshwar** (CY Cergy Paris Université)

Title: *Global-in-time Vortex Configurations for the 2D Euler Equations*

Summary: A long-standing topic of interest is to understand the desingularization problem in vortex dynamics for the incompressible 2D Euler equations: solutions of the system that approximate point vortices in the sense that the vorticity of the solution stays highly concentrated around a finite number of points on some interval of time. There are a large class of steady states that satisfy this behaviour, and also solutions that exhibit this behaviour dynamically on finite time intervals. We exhibit solutions of 2D Euler that are genuinely dynamic, and also retain this concentration of vorticity around points for all time: a spiral of three vortices separating at a sublinear rate, and a configuration approximating two vortex pairs separating at a linear rate.