

Speaker: Torstein Kastberg Nilssen

Title: *Yudovich theory for rough perturbations of Euler's equation*

Abstract:

In the talk we will begin with some insights from Vladimir Arnold about the geometric structure of Euler's equation and how it can be used to introduce noise terms which preserve physical properties of the equation. We will then consider a purely Lagrangian formulation of the equation and see how to obtain well-posedness in the class of L^∞ -solutions when $d = 2$, sometimes referred to as Yudovich theory.