

Title: *Non-Uniqueness and flexibility in Two-Dimensional Euler Equations*

Abstract: In 1962, Yudovich established the well-posedness of the two-dimensional incompressible Euler equations within the class of solutions with bounded vorticity. Since then, a central unresolved problem has been the question of uniqueness within the broader class of solutions with L^p -vorticities. Recent years have witnessed significant progress in this investigation. In my talk, I aim to provide an overview of these developments and highlight recent results obtained thanks to the convex integration method.