1163-35-1538 José D Pastrana Chiclana* (jose.pastrana@northwestern.edu). Non-uniform continuous dependence for Euler equations in Besov space.

The motion of an ideal and incompressible fluid, in a domain $\Omega \subseteq \mathbb{R}^d$, is governed by the system of partial differential equations: $\partial_t u + \nabla_u u + \nabla p = 0$. Where incompressibility translates to div u = 0 and $u_0(x) := u(0, x)$ is the initial velocity field.

We will discuss the failure of uniform continuity (in time) of the solution map $u_0 \rightarrow u$ via a construction due to Himonas and Misiołek which utilizes the approximate solutions technique. The latter traces back to Kenig, Ponce and Vega when working on KdV type equations. (Received September 15, 2020)