CMM
Center for
Mathematical
Modeling

cmm.uchile.cl

Beauchef 851, Edificio Norte, piso 7
Santiago, CHILE
CP 837 0456

tel +56 2 2978 4870

**CMM PDE Seminar**

**Speaker:** Sergio Rica (Instituto de Física, Pontificia Universidad Católica de Chile)

**Title:** The search of finite-time singularity solutions of the Euler equations for incompressible and inviscid fluids.

**Abstract:** Despite 250 years of history, the nature of solutions of the Euler equations remains an open problem. To date, it is not known if general smooth initial conditions of the Euler equations with finite energy do or do not blow-up in finite time. I will review the approach initiated by Leray of self-similar blow-up solutions. Lastly, I will show that under some conditions an axisymmetric incompressible and inviscid flow presents a finite-time singularity. This singularity appears to be generic and robust for a wide number of finite energy initial conditions.

**Modalidad:** presencial en la sala de seminarios del DIM piso 5 o bien online vía zoom:

https://uchile.zoom.us/j/92327619322?pwd=L2RXaXVrUkRiWVNnV2d6Ynpldk9Pdz09

June 28, 2022 at 12 Santiago time

Para más información y videos de seminarios pasados, ver página https://eventos.cmm.uchile.cl/pdeseminar/