

Liouville properties of the Navier-Stokes

ZHEN LEI

Fudan University, China

ABSTRACT

We establish a Liouville theorem for bounded ancient mild solutions to the axisymmetric incompressible Navier-Stokes equations on $(-\infty, 0] \times (\mathbb{R}^2 \times \mathbb{T}^1)$. Connecting the compactness of \mathbb{T}^1 to the oscillation of the stream function is a crucial observation.