Lower bound on the blow-up rate of the axisymmetric Navier-Stokes equations

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Abstract

Consider axisymmetric solutions of the incompressible Navier-Stokes equations in $\mathbb{R}^3$ with nontrivial swirl. Suppose the solution satisfies the pointwise scale invariant bound (scaling order $-1$), we prove that the solution cannot blowup.

References
