

# Local-in-space estimates near initial time for weak solutions of the Navier-Stokes equations and forward self-similar solutions

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We show that the classical Cauchy problem for the incompressible 3d Navier-Stokes equations with  $(-1)$ -homogeneous initial data has a global scale-invariant solution which is smooth for positive times. Our main technical tools are local-in-space regularity estimates near the initial time, which are of independent interest.

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