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*A New Prodi-Serrin Type Regularity Criterion in Velocity Directions*

We prove that a Leray-Hopf weak solution for the 3D incompressible Navier-Stokes equations would stay regular if a Prodi-Serrin type integrability condition in Lorentz spaces is satisfied by  $\operatorname{div}(u/|u|)$ , where  $u$  is the velocity function. This is joint work with Mr. Benjamin Pineau.