

Abstract Submitted
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Fluid dynamics/gravity correspondence¹ ELIZAVETA GUSEVA, Stony Brook University — Description of the behavior of viscous fluids with $Re \gg 1$ is a long standing major problem of modern classical physics. Turbulence is governed by the Navier-Stokes equations, the space of solutions of which is understood badly. A correspondence between dynamics of metrics perturbations of certain black hole solutions and dynamics of a incompressible viscous fluid is found. This correspondence might enable us to analyze the behavior of singularities in Navier-Stokes equations using the well-developed methods of singularity treatment of general relativity.

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- Prefer Oral Session
 Prefer Poster Session

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