
MAGDALENA CZUBAK, SUNY Binghamton

On some properties of the Navier-Stokes equation on the hyperbolic space.

Contrary to what is known in the Euclidean case, finite energy and finite dissipation solutions to the Navier-Stokes equation on a two dimensional hyperbolic space are nonunique. We review the nonuniqueness result and discuss possible ways to arrive at uniqueness of solutions in the hyperbolic setting. This is based on joint works with Chi Hin Chan and Pawel Konieczny.