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Chi Hin Chan and **Magdalena Czubak*** (czubak@math.binghamton.edu). *Uniqueness questions for the Navier-Stokes equation in the hyperbolic setting.*

The smoothness and uniqueness of the Leray-Hopf solutions for the Navier-Stokes equations is well-known in 2D. Contrary to what is known in the Euclidean setting, in our previous work we showed that there is non-uniqueness in 2D for simply connected manifolds with negative sectional constant curvature. The goal of this talk is to show how we can restore uniqueness. In the process, we develop the theory of weak solutions to the Navier-Stokes equations on the 2D hyperbolic space. (Received September 14, 2013)