### BOSTON UNIVERSITY MATHEMATICS COLLOQUIUM

# Dynamical Systems and the Two-Dimensional Navier-Stokes Equations

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#### Friday, November 13 at 4 pm SCI 117

**Abstract:** Two-dimensional fluid flows exhibit a variety of coherent structures such as vortices and dipoles which often serve as organizing centers for the subsequent evolution of the flow. These coherent structures can sometimes be associated with the existence of special geometrical structures in the phase space of the equations and in these cases the evolution of these flows can be studied with the aid of dynamical systems theory.

At 3:00 pm, tea will be served in MCS 144.