Texas Tech University. Analysis Seminars.

Gevrey classes and the Navier-Stokes equations. Part II.

Luan Hoang

Texas Tech University

Monday, February 26, 2018
Room: MATH 108. Time: 4:00 pm.

ABSTRACT. We study spatially periodic functions of Gevrey classes. These functions are analytic everywhere with a uniform radius of analyticity, and their norms are stronger than all Sobolev ones. Basic estimates for solutions of the Navier-Stokes equations in Gevrey spaces will be proved. Applications to asymptotic expansions for Leray-Hopf weak solutions will be demonstrated. Strong results with simple calculations are obtained by using the celebrated Foias-Temam techniques.