TEMPLE UNIVERSITY

Department of Mathematics

Analysis Seminar

Wachman 617

Monday, December 6 2021, 2:40 p.m.

Dyadic models for fluid equations

by Mimi Dai

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Abstract: Inspired by the study of dyadic models for the Navier-Stokes equation, we propose some simplified models for the magnetohydrodynamics in order to have a better understanding on various topics. Pathological solutions are constructed, for instance, solution that blows up at finite time and non-unique Leray-Hopf solutions. Challenging questions will be discussed too. Most of the work is joint with Susan Friedlander.