Thursday
February 4th
4:10 - 5:00 pm AG 1032

Reception before the talk:
RH 223 at 3:30 pm

Edriss Titi
Texas A&M University &
The Weizmann Institute of Science

IS DISPERSION A STABILIZING OR DESTABILIZING MECHANISM?

In this talk I will present a unified approach for the effect of fast rotation and dispersion as an averaging mechanism for, on the one hand, regularizing and stabilizing certain evolution equations, such as the Navier-Stokes and Burgers equations. On the other hand, I will also present some results in which large dispersion acts as a destabilizing mechanism for the long-time dynamics of certain dissipative evolution equations, such as the Kuramoto-Sivashinsky equation.