

## Analysis and Applied Mathematics Seminar

### *Applications of the Shear-flow Induced Enhanced Dissipation*

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**Abstract:** In this talk, we consider the enhanced dissipation phenomena induced by shear flows. In the first part of the talk, I will introduce the idea of shear flow-induced enhanced dissipation and the recent developments on this topic. Then I will exhibit the applications of this phenomenon in various settings, ranging from suppression of chemotactic blow-ups to enhancement of chemical reactions.

Monday, November 1 at 4:00 PM in Zoom