

Fall 2017

Mathematical Sciences/ RTG Colloquium

“Extreme events, tail statistics, and large deviation theory in geophysical flows”

In recent years several analytical and numerical methods have been introduced to characterize the pathway, rate, and likelihood of rare but important events. These methods build on large deviation theory, which indicates that the way such events occur is often predictable and offers way to compute them via solution of an optimization problem for their most likely path. In this talk, I will discuss the applicability of these techniques to geophysical flows, for example to explain transitions between metastable patterns in atmospheric flows or to quantify the probability and mechanism of appearance of rogue waves.

Speaker: Eric VandenEijnden

(Courant Institute)

Monday, November 6, 2017

Time: 4:00 – 5:00 PM

Location: AE214

4:00-5:00pm

Host: Gregor Kovacic