

Analysis and Applied Mathematics Seminar

Some recent progress in the weak noise theory of the KPZ equation

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Abstract: The Kardar-Parisi-Zhang (KPZ) equation is a nice model for random interface growth. In this talk, we will study the Freidlin–Wentzell LDP for the KPZ equation using the variational principle. Such an approach goes under the name of the weak noise theory in physics. We will explain how to extract various limits of the most probable shape of the KPZ equation in the setting of the Freidlin–Wentzell LDP. The talk is based on several joint works with Pierre Yves Gaudreau Lamarre and Li-Cheng Tsai.

Monday, February 20 at 4:00 PM in 1227 SEO