

# Law of iterated logarithms of the Kardar–Parisi–Zhang equation

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The Kardar–Parisi–Zhang (KPZ) equation is a fundamental stochastic PDE related to modeling random growth processes, Burgers turbulence, interacting particle system, random polymers etc. In this talk, we focus on how the peaks and valleys of the KPZ height function (centered by time/24) at any spatial points grow as time increases. In particular, we will ask what are scalings of peaks and valleys of the KPZ equation and whether they converge to any limit under those scalings. These questions will be answered via the law of iterated logarithms. This talk will be based on a joint work with Sayan Das from Columbia University.