

Physics Colloquium

Professor Tim Halpin-Healy

Physics, Barnard College,

Columbia University

Within & Beyond the Realm of KPZ

Friday, April 27, 2017

2:30 pm—3:30 pm

210 Robeson Hall

We discuss significant events in the recent Renaissance triggered by the enigmatic and elusive, but reach stochastic nonlinear PDE of Kardar, Parisi & Zhang, * a celebrated equation whose reach far exceeds its grasp, touching such diverse phenomena as non-equilibrium stochastic growth, optimal paths in ill-condensed matter, the dynamics of driven lattice gases, as well as the extremal statistics of random matrix eigenvalues.

*J. Stat. Phys. 160, 794 (2015).