Workshop & SCGP Weekly Talk Speaker: Amal Aggarwal

Tuesday, October 3•1:15 – 2:15pm
Location: SCGP 102

Title: A Characterization for the Airy Line Ensemble
Speaker: Amal Aggarwal
Abstract: The Airy line ensemble is a universal scaling limit that is believed (and in some cases proven) to govern the fluctuations of many probabilistic systems, such as random surfaces, interacting particle systems, and stochastic interfaces. It is an example of a "Brownian line ensemble," which informally means that it is an infinite, ordered sequence of random continuous curves that look like non-intersecting Brownian motions. In this talk we survey recent results characterizing the Airy line ensemble as the unique Brownian line ensemble whose top curve decays parabolically, and we explain why this result is useful for proving convergence theorems for various discrete stochastic models.