The Fyodorov-Hiary-Keating conjecture

Paul Bourgade, NYU

Abstract: Fyodorov-Hiary-Keating established a series of conjectures concerning the large values of the Riemann zeta function in a random short interval. After reviewing the origins of these predictions through the random matrix analogy, I will explain work with Louis-Pierre Arguin and Maksym Radziwill, which proves a strong form of the upper bound for the maximum, and more recently the lower bound.