Speaker: Kevin Kwan

Title: Zeros, convexity, and variations

Abstract: The Riemann zeta function and its generalizations to automorphic L-functions stand at the centre of number theory, with the distribution of their zeros intimately connected to that of arithmetic objects such as prime numbers/ideals and class groups. In this talk, I will present new unconditional results on critical zeros for L-functions up to GL(3), building on the ideas of Levinson and Conrey–Iwaniec–Soundararajan, and introducing new variations on their methods. This is a joint work with Brian Conrey, David Farmer, Yongxiao Lin, and Caroline Turnage-Butterbaugh.