Algebra and Number Theory Seminar

Title: Symmetric power functoriality for modular forms

Speaker: James Newton (London)

Date: Thu 26th November 2020 at 2:00PM

Location: Online

Abstract: One prediction of the Langlands program is that all 'reasonable' L-functions should arise from automorphic forms. For example, the modularity theorem of Wiles, Breuil, Conrad, Diamond and Taylor identifies the Hasse-Weil L-function of an elliptic curve defined over the rationals with the L-function of a modular form. More generally, the symmetric power L-functions of elliptic curves should be the L-functions of higher rank automorphic forms. This prediction is closely related to the arithmetic of the elliptic curve (e.g. the Sato-Tate conjecture). I will discuss this circle of ideas, including some recent work with Jack Thorne in which we prove automorphy of these symmetric power L-functions.

Zoom Link: https://ucd-ie.zoom.us/j/95697362979?pwd=U2k2L2VuZ1RVd2NmWldQTEt5VFFLZz09

Passcode: The numerator of Riemann zeta at -11.

https://maths.ucd.ie/ kazim$_b$/$UCD_ANT_Seminar.html$