REPRESENTATION THEORETIC VIEWS OF THE MODIFIED DIAGONAL

Speaker: Congling Qiu
MIT

Time：Mon., Nov. 20th, 10:30-11:30
Tencent Meeting ID: 368 434 174, Password: 112358

Abstract:

The modified diagonal cycle on the triple product of a curve was first introduced by Gross and Schoen in 1992. This simply defined object holds fundamental importance in the study of the geometry and arithmetic of curves. One basic question is whether this cycle "deforms" to 0. Such deformation to 0 is implied by the non-vanishing of the central value of the triple product L-function, under the notorious Beilinson–Bloch conjecture (generalization of the Birch–Swinnerton-Dyer conjecture). One result in my work with W. Zhang conforms this implication for Shimura curves. Our approach is representation theoretic. Other results will also be discussed.