NON-REDUCTIVE SPECIAL CYCLES AND ARITHMETIC FUNDAMENTAL LEMMAS

Speaker: Zhiyu Zhang
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Time：Mon, Jul. 15, 10:00-11:00

Venue: Room 102, SCMS

Abstract: We care about arithmetic invariants of polynomial equations e.g. L-functions, which conjecturally are often automorphic and related to special cycles on Shimura varieties. In this talk, I will introduce a family of (mirabolic) special cycles on local Shimura varieties, which have interesting geometry and could be used to construct more arithmetic kernel functions (with applications to arithmetic invariants). As an example, I will formulate and prove the twisted arithmetic fundamental lemma in the context of twisted Gan-Gross-Prasad conjectures.