Ana Caraiani

On vanishing of torsion in the cohomology of Shimura varieties

I will talk about work in progress with Peter Scholze, the goal of which is to understand in what degrees torsion can occur in the cohomolohy of Shimura varieties. I will discuss the Hodge-Tate period map, the stratification of the period domain and the relationship between Shimura varieties and Rapoport-Zink spaces at infinite level.