

March 7: Sug Woo Shin (Harvard), “Representations in the cohomology of Rapoport-Zink spaces. THIS TALK WILL TAKE PLACE AT 4:00.

Rapoport-Zink spaces are certain moduli spaces of p -divisible groups whose cohomology is expected to “realize” the local Langlands correspondence. Harris and Taylor studied some simple Rapoport-Zink spaces by relating them to Shimura varieties and could prove the local Langlands conjecture for $GL(n)$. Fargues obtained results about cohomology of slightly more general Rapoport-Zink spaces, taking a more rigid-analytic approach. I will explain how I can recover Fargues’s theorem by a different method, and how I may go further.