An introduction to Rapoport Zink spaces and their l-adic cohomology

Laurent Fargues

lfargues@math.jussieu.fr
Universite Paris 7, France

Rapoport Zink spaces are p-adic rigid spaces, local analog at p of the hermitian symmetric domains. M.Harris and R.Taylor have proved the local Langlands correspondence by showing it appears in the cohomology of Lubin Tate spaces (a particular case of R.Z. spaces). I will explain the objects behind the R.Z. spaces and the general strategy I have used to generalize the work of Harris and Taylor and prove that the cohomology of basic unramified R.Z. spaces realizes local Langlands correspondences.