Geometrization of the local Langlands program: an introduction
Arthur-César Le Bras (Paris 13)

Abstract: There has been recently spectacular progress in the understanding of the geometry underlying the local Langlands correspondence, mainly due to Fargues and Scholze. This talk will be an introduction to this circle of ideas. In particular, I would like to explain: 1) explain how to geometrize the notion of a smooth admissible representation of a p-adic reductive group, like $\text{GL}_n(\mathbb{Q}_p)$. 2) the $\text{GL}_1$ case (Fargues), or how simple connectedness of spaces of non-zero global sections of vector bundles on the Fargues–Fontaine curve leads to a new proof of local class field theory. No strong familiarity with the Langlands program and p-adic Hodge theory will be assumed.

Wednesday, October 16 at 3:00 PM in 1227 SEO