## Séminaire d'algèbre, topologie et géométrie Jeudi 26 octobre à 14h Salle I

## Jorge Antonio

Toulouse

Moduli of p-adic representations of a profinite group

We construct the moduli space of p-adic representations of a profinite group of topologically finite presentation G as a non-archimedean stack. As referred in [deligne2015comptage] one should not expect such moduli space to be representable by an algebraic stack as continuous representations  $\rho : G \longrightarrow GL_n(k)$  fix a compact lattices. We extend the classical generic fiber construction to the derived world which allow us to define a topology on derived analytic rings. Using the Representability theorem in the derived k-analytic setting, [porta2017representability], we show that such moduli non-archimedean stack admits a canonical derived extension which is representable by a derived k-analytic stack.