

## **abstract**

SHIMURA VARIETIES AND TRACE FORMULA SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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I will first explain one can parametrize some particular cases of  $p$ -adic moduli spaces of  $p$ -divisible groups, Lubin-Tate spaces, by the geometric realization of Bruhat-Tits buildings. By a  $p$ -adic space I mean Berkovich analytic space. I will then explain how this extends to a parameterization of the  $p$ -adic spaces associated to some particular cases of Shimura varieties by compactifications of those buildings, the Lubin-Tate spaces being some  $p$ -adic Milnor fiber inside those  $p$ -adic Shimura varieties. I will then explain how to study the  $p$ -adic geometry of more general Shimura varieties or more general moduli spaces of  $p$ -divisible groups by using Harder-Narasimhan filtrations for finite flat group schemes and  $p$ -divisible groups. Those filtrations allows us to study  $p$ -adic reduction theory (in the sens of Siegel) for the action of Hecke correspondences at  $p$  on those  $p$ -adic moduli spaces.