

# A Tannakian formalism for Bruhat-Tits buildings

*Tuesday, 19 July 2022 11:30 (1 hour)*

In the theory of reductive groups over local fields, Bruhat-Tits buildings are the analogues of symmetric spaces in the theory of Lie groups. I will start with an introduction to these objects.

By Goldman-Iwahori, the Bruhat-Tits building of the general linear group  $GL_n$  over a local field  $k$  can be described as the set of non-archimedean norms on the vector space  $k^n$ . I will explain how via a Tannakian formalism this can be generalized to a concrete description of the Bruhat-Tits building of an arbitrary reductive group. This also gives a description of the functor of points of Bruhat-Tits group schemes.

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