

DESCENT IN BRUHAT-TITS THEORY

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Bruhat-Tits theory applies to a semisimple group G , defined over an henselian discretely valued field K , such that G admits a Borel K -subgroup after an extension of K . The construction of the theory goes then by a deep Galois descent argument for the building and also for the parahoric group scheme. In the case of unramified extension, that descent has been achieved by Bruhat-Tits at the end of [BT2]. The tamely ramified case is due to G. Rousseau [R]. Recently, G. Prasad found a new way to investigate the descent part of the theory. This is available in the preprints [Pr1, Pr2] dealing respectively with the unramified case and the tamely ramified case. It is much shorter and the method is based more on fine geometry of the building (e.g. galleries) than algebraic groups techniques.