

Titel: Flattening techniques in non-archimedean geometry

Abstract:

In 2022, inspired by the work of Raynaud and Gruson, Antoine Ducros proved a flattening result for coherent modules over a base. Even though his methods are close to those already existing in algebraic geometry, the result is far more difficult to obtain in the non-Archimedean context. In general, flatness can only be achieved after a base change consisting of a composition of blow-ups and quasi-étale morphisms. In this talk, I will present my work to establish, in the boundaryless case, a local version of this theorem without quasi-étale maps. The key point is the ability to factorize a morphism into a finite map followed by a morphism with geometrically connected fibers.