Berkovich spaces and birational geometry

Abstract:

At the end of the eighties, Berkovich developed a new theory of analytic geometry over non-archimedean valued fields (such as the p-adic numbers or the complex Laurent series). This theory has quickly found many applications in algebraic and arithmetic geometry. In this talk, which is based on recent joint work with Mircea Mustata and Chenyang Xu, I will explain some interactions with the birational geometry of one-parameter degenerations of complex projective varieties. No prior knowledge of Berkovich spaces is assumed.

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