Equidistribution of preimages in nonarchimedean dynamics

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Nonarchimedean dynamics is a young branch of dynamics that runs parallel to (and has interactions with) the more classical field of complex dynamics. In this talk, I will discuss some of the difficulties that arise when doing analysis and dynamics over nonarchimedean fields, and describe ways of overcoming them. I will do this in the context of discussing recent progress in solving the equidistribution of preimages problem, which aims to provide a dynamical construction of a canonical invariant measure associated to nonarchimedean dynamical systems. In addition, I will highlight a connection between dynamical equidistribution results and more recent arithmetic equidistribution results from Arakelov geometry.