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**William Gignac\*** ([wgignac@umich.edu](mailto:wgignac@umich.edu)), Department of Mathematics, 2074 East Hall, 530 Church St, Ann Arbor, MI 48109. *Equidistribution of Preimages in Berkovich Projective Space.*

In complex dynamics, in particular in the study iteration of holomorphic maps  $f: \mathbb{P}^k \rightarrow \mathbb{P}^k$ , an important result is that the iterated preimages  $f^{-n}(x)$  of generic points  $x \in \mathbb{P}^k$  equidistribute to the equilibrium measure on the Julia set of  $f$ . This result has recently been extended to the Berkovich projective line over nonarchimedean fields by Favre and Rivera-Letelier. In this talk I will discuss the problem of equidistribution of preimages in higher dimensional Berkovich projective spaces over trivially valued fields. (Received September 21, 2011)