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*On the Hausdorff dimension of  $p$ -adic Cantor sets.* Preliminary report.

We use techniques from symbolic dynamics and Perron-Frobenius theory to compute the Hausdorff dimension of certain  $p$ -adic fractal sets. This work began in the 3-adic case as joint work with Lagarias, intended to address a problem of Erdős. We record tight bounds obtained in the 3-adic case, and report on preliminary findings in the general case. (Received September 13, 2013)