

1157-11-231

Simon Marshall* (marshall@math.wisc.edu), Department of Mathematics, UW Madison, 480 Lincoln Dr, Madison, WI 53706, and **Mathilde Gerbelli-Gauthier**. *Strong uniform admissibility for representations of GL_n and Sarnak's density conjecture.*

Let π be an irreducible admissible representation of $GL_n(\mathbb{Q}_p)$, and let $K(n)$ be the usual principal congruence subgroups. We give a strong uniform bound for the dimension of the subspace of π fixed by $K(n)$ that depends only on n (and not on π), in various cases including when π is supercuspidal or a Speh representation. We present an application of these results to Sarnak's density conjecture on limit multiplicities of nontempered forms, which is joint work in progress with Mathilde Gerbelli–Gauthier. (Received January 29, 2020)