

# BOUNDS ON THE HOMOLOGY TORSION

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I will discuss upper bounds on the torsion in homology of locally symmetric spaces by means of their volume. For hyperbolic 3-manifolds there is no such bound. Conjecturally, for any other locally symmetric space of non-compact type such a bound exists: the torsion group size is bounded by an exponent of the volume, with a coefficient depending only on the dimension. I will indicate the proof the conjecture for rank 1 symmetric spaces. Based on a joint work with Tsachik Gelander and Roman Sauer.