

## Gap in critical exponents of $SL_2(\mathbb{R})$ orbits in nonarithmetic quotients of $SL_2(\mathbb{C})$

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We will discuss the following result. For every nonarithmetic lattice  $\Gamma < SL_2(\mathbb{C})$  there is  $\varepsilon_\Gamma$  such that for every  $g \in SL_2(\mathbb{C})$  the intersection  $g\Gamma g^{-1} \cap SL_2(\mathbb{R})$  is either a lattice or has critical exponent  $\delta(g\Gamma g^{-1} \cap SL_2(\mathbb{R})) \leq 1 - \varepsilon_\Gamma$ . This result extends Mohammadi-Margulis and Bader-Fisher-Milner-Strover. We will focus on an ergodic component of the proof, asserting certain preservation of entropy-contribution under limits of measures.

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