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*Limit multiplicity of non-tempered representations and endoscopy.*

How fast do Betti numbers grow in a congruence tower of compact arithmetic manifolds? The question can be reformulated in terms of limit multiplicity of representations. If the representation is discrete series, the rate of growth is known to be proportional to the volume of the manifold; otherwise the growth is sub-linear in the volume. Sarnak-Xue have conjectured that bounds on multiplicity growth can be expressed in terms of the failure of representations to be tempered. I will confirm some instances of the Sarnak-Xue conjecture for unitary groups using the fact that some non-tempered representations arise as endoscopic transfer, and give applications to cohomology growth.