**Algebraic Relations and Integrality of Limit Sets of Maximal Cusp Groups**

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Limit sets of maximal cusp groups are circle packings of the Riemann sphere that are invariant under a kleinian group, and are rigid, i.e. determined up to Möbius transformation, by a theorem of Maskit-Keen-Series. The Apollonian Circle Packing is an example of a maximal cusp group limit set. These circle packings are determined by algebraic relations as described in the author's article "Searching for the Cusp" (London Math. Soc. Lecture Notes, vol. 329). Commonly, the normalized Hermitian forms of the circles in these packings have algebraic integer entries, and satisfy algebraic relations analogous to the Descartes Circle Theorem for Apollonian packings. This talk will illustrate these limit sets and describe some of their algebraic number theory.