

Arithmetic hyperbolic reflection groups

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A group of isometries of the hyperbolic n -space is called a reflection group if it has a finite generating set which consists of reflections in hyperplanes. The study of hyperbolic reflection groups has a long and remarkable history going back to the papers of Makarov and Vinberg. In recent years there has been a wave of activity in this area which has led to a solution to the open question of the finiteness of these groups and to some quantitative results towards their classification. In the talk I will review the recent results and discuss some open problems concerning arithmetic hyperbolic reflection groups.