







复旦大学数学科学学院

数学综合报告会

报告题目: Presentations for cusped arithmetic hyperbolic

lattices

报告人: Julien Paupert (Arizona State University)

时间: 2022-12-01 星期四 10:00-11:00

地点: Meeting Zoom ID: 853 0188 1524, password:

Fudan2022

报告摘要:

We present a general method to compute a presentation for any cusped hyperbolic lattice $\$ Gamma\$, applying a classical result of Macbeath to a suitable $\$ Gamma\$-invariant horoball cover of the corresponding symmetric space. As applications we compute presentations for the Picard modular groups $\$ $\$ PU}(2,1, \mathcal{O}_d)\$ for \$d=1,3,7\$ and the quaternionic lattice $\$ \mathcal{H}\)\$ with entries in the Hurwitz integer ring \$ \mathcal{H}\. This is joint work with Alice Mark.

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