

***PRESENTATIONS FOR CUSPED ARITHMETIC
HYPERBOLIC LATTICES***

Fudan Topology Seminar

Speaker: Julien Paupert

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Time: Thur, Dec. 1st, 10:00-11:00

Meeting Zoom ID: 853 0188 1524 password: Fudan2022

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