

Oberseminar zur Algebra und Algebraischen Kombinatorik und Algebraische Geometrie

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Fast implementation of Vinberg algorithm

The Vinberg's algorithm allows to determine the fundamental domain of an hyperbolic Coxeter group. We report on the classical theory of this algorithm but concentrate on the implementation aspects. We will consider following aspects of the algorithm:

- Termination condition for the enumeration when a group has a finite root diagram.
- Termination when the fundamental domain will have an infinity of facets. The code has been implemented over \mathbb{Z} and extension to number ring are under consideration.

**Freitag, 22.10.2021
ab 14:00 Uhr, Hörsaal f442**

Alle Interessierten sind herzlich eingeladen.

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