Grishukhin, Viacheslav
Uniquely scaled dual cells. (English) Zbl 1422.52008

A parallelotope is a $d$-polytope such that one can fill facet to facet the space $\mathbb{R}^d$ by its translation copies without gaps and intersections by inner points. The famous Voronoi conjecture states that any parallelotope is the Dirichlet-Voronoi domain of some lattice and some positive metric.

The author introduces a new class of parallelotope tilings named as $k$-uniquely scaled tilings and proves Voronoi conjecture for the corresponding parallelotopes.

Reviewer: Anton Shutov (Vladimir)

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Keywords:
parallelotope; parallelotope tiling; dual cell; Voronoi conjecture

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References:

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