

**Balkan, V. V.**

**On non-normal partitions of Lobachevskij space.** (Russian) [Zbl 0739.51016](#)  
Mat. Issled. 119, 29-38 (1990).

A partition  $P$  of the  $n$ -space  $S_n$  into polytopes is regular if to any two polytopes there is a mapping of  $P$  carrying one polytope into any other.  $P$  is non-normal if in  $P$  there are couples of polytopes having  $(n - 1)$ -dimensional proper parts of the  $(n - 1)$ -faces in common.

Examples of infinite series of non-normal regular partitions of the 3-, 4- and 5-dimensional Lobachevskij space are presented.

Reviewer: [E.Jucovic \(Košice\)](#)

**MSC:**

- [51M20](#) Polyhedra and polytopes; regular figures, division of spaces
- [52C22](#) Tilings in  $n$  dimensions (aspects of discrete geometry)
- [51M10](#) Hyperbolic and elliptic geometries (general) and generalizations

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