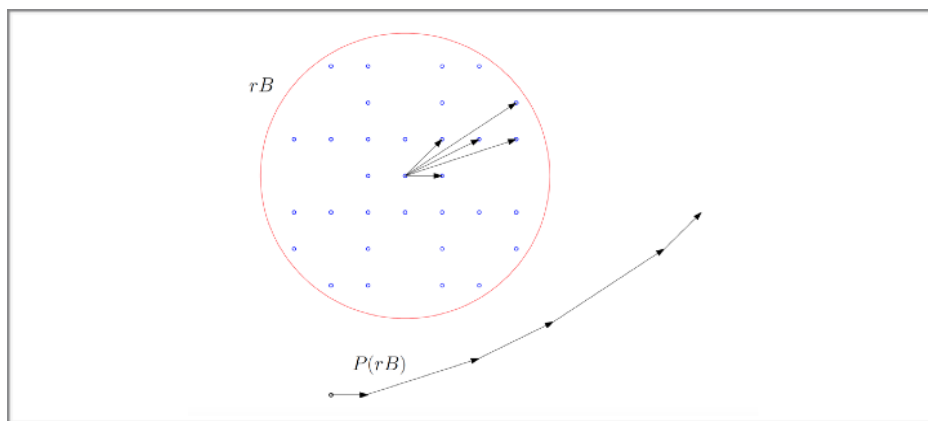


NOVEMBER

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# Mathematik Kolloquium Innsbruck

**Imre Bárány**

Hungarian Academy of Sciences, Budapest  
University College London

## Extremal Problems for Convex Lattice Polytopes

In this survey talk I will present several extremal problems, and some solutions, concerning convex lattice polytopes. A typical example is to determine the minimal volume that a convex lattice polytope can have if it has exactly  $n$  vertices. Other examples are the minimal surface area, or the minimal lattice width in the same class of polytopes. These problems are related to a question of V I Arnold from 1980 asking for the number of (equivalence classes of) lattice polytopes of volume  $V$  in  $d$ -dimensional space, where two convex lattice polytopes are equivalent if one can be carried to the other by a lattice preserving affine transformation.

Donnerstag 3. November 2016, 16:45 Uhr, HS F

ab 16:00 Uhr Kaffee im Mathematikinstitut

Gäste und Studierende sind herzlich willkommen!

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