

Konstanz

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Frauen in der Mathematik

Dienstag 16.05.2017
17:00-18:15

Raum: F426

"Face numbers of (balanced) simplicial polytopes and manifolds"

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Given a closed manifold M together with a triangulation Δ , a classical question in geometric combinatorics and discrete geometry asks for the smallest number of vertices Δ can possibly have. Fixing the number of vertices, one can even wonder, what the smallest/largest number of edges are. More generally, a classical problem is to characterize all possible face numbers of Δ . The first part of this talk will provide a brief introduction into the study of face numbers of simplicial polytopes and manifolds and survey some of the most classical and important results. In the second part, we will consider so-called balanced triangulations, where a triangulation is balanced if and only if there exists a coloring of its vertices without monochromatic edges. In particular, we will be interested in lower bounds for the face numbers of this type of triangulations. This is joint work with Satoshi Murai, Isabella Novik and Connor Sawaske.

Zum Vortrag ergeht herzliche Einladung.

Unterstützt durch Gleichstellungsrat
der Universität Konstanz

