

Mathematisches Kolloquium

EINLADUNG

Prof. Dr. Constantin Teleman

(University of Berkeley)

“Introduction to quadratic topology”

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Abstract:

A symmetric bilinear form $B: \mathbb{Q} \times \mathbb{Q} \rightarrow \mathbb{Q}$ has a unique quadratic refinement, a homogeneous quadratic function $q: \mathbb{Q} \rightarrow \mathbb{Q}$ such that $B(x, y) = q(x+y) - q(x) - q(y)$. It is given by the formula $q(x) = \frac{1}{2}B(x, x)$. When division by 2 is problematic, the relation between quadratic and symmetric bilinear forms becomes more complicated. We will review this relation on abelian groups, and several appearances of these notions in topology. In particular, we will see why the problem, though connected with the number 2, is not one of division by 2.

**Zeit: Mittwoch, 21. Oktober 2015
15.45 Uhr Kaffeejause,
anschließend 16.15 Uhr Vortrag**

**Ort: Fakultät für Mathematik,
Oskar-Morgenstern-Platz 1,
Sky Lounge**

Nils Carqueville
Harald Rindler