



E i n l a d u n g

zum

Kolloquium des Mathematischen Instituts
(unterstützt durch GK Topologie und Metageometrie und
Leibniz-Preis)

am Donnerstag, 22.07.2010 um 16:30 Uhr, im Hörsaal M5, spricht

Professor Anders Karlsson

(Universität Genf)

über das Thema:

„Spanning trees and heights of tori“

Abstract:

The number of spanning trees of a finite graph is called the complexity and is an important invariant also outside of mathematics, such as in statistical physics or communication network theory. Using discrete heat kernel methods we obtain a rather precise asymptotics for the complexity of certain discretizations of real tori. A constant appearing in this asymptotic formula is the height of the corresponding real torus. This number is the derivative at 0 of a spectral zeta function and is known to be expressible in terms of modular forms. Conjecturally it is also related to regular sphere packings. Joint work with G. Chinta and J. Jorgenson.

Tee wird ab 16 Uhr im SR0 des Mathematischen Instituts serviert.