Oberseminar
Zahlentheorie und Arithmetische Geometrie

Dr. Anders Södergren

(University of Copenhagen)

"The generalized circle problem, mean value formulas and Brownian motion"

The generalized circle problem asks for the number of lattice points of an n-dimensional lattice inside a large Euclidean ball centered at the origin. In this talk I will discuss the generalized circle problem for a random lattice of large dimension n. In particular, I will present a result that relates the error term in the generalized circle problem to one-dimensional Brownian motion. The key ingredient in the discussion will be a new mean value formula over the space of lattices generalizing a formula due to C. A. Rogers.

This is joint work with Andreas Strömbergsson.

Donnerstag, 14.01.2016
12:00 Uhr, Raum g117
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie
und Diskrete Mathematik