



Forschergruppe 877

**Universität Leipzig**  
Fakultät für Physik und  
Geowissenschaften  
Institut für Theoretische Physik

Gemeinsames

## **NTZ - Kolloquium / FOR877- Seminar**

Am Freitag, dem 09.11.2012 um 16:00 Uhr spricht

**Dr. N. Clisby**  
(University of Melbourne)

über

**There are  $7 \times 10^{26\ 018\ 276}$  self-avoiding walks of  
38 797 311 steps on  $\mathbb{Z}^3$**

Abstract:

We obtained via Monte Carlo simulation a radically improved estimate for the connective constant of the self-avoiding walk model on  $\mathbb{Z}^3$ :  $\mu = 4.68403993(3)$ . Our computer experiment combined a novel algorithm and a recent, extremely efficient implementation of the pivot algorithm. As a by-product of this approach we are able to directly estimate the number of self-avoiding walks to high precision.

**Ort:** ITP, Raum 210

*Interessenten sind herzlich eingeladen!*