

## **SFB Seminartag**

#### ZEIT:

13.11.2007, 16:00 Uhr - 19:00 Uhr

#### **ORT:**

HU-Berlin Invalidenstraße 42 Nordbau, Hörsaal 8 10115 Berlin

#### **PROGRAMM:**

16:00 - 17:00 **Prof. Gavril Farkas** 

### The enumerative geometry of the moduli space of curves

The moduli space M\_g of Riemann surfaces of genus g is a central object in mathematics. In the last two decades we have witnessed major

advances in understanding its geometry using ideas from algebraic geometry, topology and physics. I will discuss problems related to the

cohomology of M\_g (Witten's conjecture on intersection numbers inspired by two dimesnional gravity, Faber's conjecture on the tautological ring of the moduli space) as well as a few question concerning the global nature of M\_g as an algebraic variety.

17:00 - 17:30 Kaffeepause

17:30 - 18:30 **Dr. Harald Dorn** 

# Conformal anomalies and double trace deformations in AdS/CFT

We start with a sketch of some basic facts concerning conformal anomalies

in quantum field theories as well as their holographic description

#### **Kontakt:**

within

the AdS/CFT correspondence. The second part of the talk will describe own

work on the nextleading large N contribution to the anomaly in conformal

theories at the two endpoints of a renormalization group flow triggered

by a double trace deformation. We show the exact equality between the

dimensionally regularized partition functions involved on both sides of

the correspondence.