



SFB Colloquium

TIME:

13 Nov 2007, 16:00 - 19:00

LOCATION:

HU-Berlin
Invalidenstraße 42
Nordbau, Hörsaal 8
10115 Berlin

PROGRAM:

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 dimensional 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 Coffee Break

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

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within
the AdS/CFT correspondence. The second part of the talk will
describe own
work on the next leading 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.

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