



## SFB-Seminartag

### ZEIT:

5.6.2006, 14:00 Uhr - 17:00 Uhr

### ORT:

Humboldt-Universität zu Berlin  
Unter den Linden 6  
Hauptgebäude, Hörsaal 3075  
10099 Berlin

### PROGRAMM:

14:00 - 15:00 **Dr. Dario Martelli (CERN Genf)**

#### **AdS/CFT-inspired Sasaki-Einstein geometry**

The AdS/CFT correspondence motivates the study of Sasaki-Einstein manifolds, and their associated non-compact Calabi-Yau cones. I will discuss aspects of these geometries, and their relation to properties of the dual superconformal field theories. In particular, I will discuss the geometric counterpart of  $\alpha$ -maximization in terms of a problem of volume minimisation. I will show how the case of toric manifolds can be treated with elementary methods based on the underlying convex polytopes. The general case requires more sophisticated techniques involving localisations, and yielding a relation to an equivariant index theorem.

15:30 - 16:30 **Prof. Dr. Jan Plefka (HU Berlin)**

#### **The AdS(5)xS(5) superstring in light-cone gauge**

n.a.

### Kontakt:

Humboldt-Universität zu Berlin . Institut für Mathematik  
SFB 647 . Unter den Linden 6 . 10099 Berlin  
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727  
sfb647@math.hu-berlin.de

[www.raumzeitmaterie.de](http://www.raumzeitmaterie.de)