



# Integrability in Gauge and String Theory

**ZEIT:**

24.7.2006 - 28.7.2006

**ORT:**

Max-Planck-Institut für Gravitationsphysik  
(Albert-Einstein Institut)  
Potsdam, Germany

**PROGRAMM:****24.7.2006**

10:10 - 11:00 **Konstantin Zarembo**

**Bethe Ansatz in Stringy Sigma-Models**

11:00 - 11:30 Kaffeepause

11:30 - 12:20 **Zvi Bern**

**The S-Matrix Reloaded: Twistors, Unitarity, Gauge Theories and Gravity**

12:20 - 13:10 **Lev Lipatov**

**Transcendentality and the Eden-Staudacher Equation**

13:10 - 15:00 Mittagspause

15:00 - 15:50 **Igor Klebanov**

**Strings, D-Branes and Gauge Theories**

15:50 - 16:40 **Alexander S. Gorsky**

**Different Images of Integrability in Gauge Theories****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

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## **25.7.2006**

10:10 - 11:00 **Arkady Tseytlin**

### **On the Spectrum of Strings in AdS5 x S5**

11:00 - 11:30 Kaffeepause

11:30 - 12:20 **Alexei Tselik**

### **Bethe Ansatz Applications to Problems in Gauge and String Theory**

12:20 - 13:10 **Rafael Hernández**

### **Quantum Corrections to the String Bethe Ansatz**

13:10 - 15:00 Mittagspause

15:00 - 15:50 **Diego Hofman**

### **Giant Magnons**

15:50 - 16:40 **Jörg Teschner**

### **The Sinh-Gordon Model - A Warm-Up for Noncompact Nonlinear Sigma Models?**

## **26.7.2006**

10:10 - 11:00 **Nicolai Reshetikhin**

### **Integrability and Algebraic Structures**

11:00 - 11:30 Kaffeepause

11:30 - 12:20 **Andrei Mikhailov**

### **Local Charges and Nonlocal Poisson Brackets**

12:20 - 13:10 **Romuald A. Janik**

### **Crossing Equation for the AdS5 x S5 S-Matrix**

13:10 - 15:00 Mittagspause

15:00 - 15:50 **Nick Dorey**

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## **Magnon Boundstates and the AdS/CFT Correspondence**

15:50 - 16:40 **Tristan McLoughlin**

### **Classical and Quantum Strings in AdS5 x S5**

**27.7.2006**

10:10 - 11:00 **Jean-Michel Maillet**

### **Correlation Functions of Heisenberg Spin Chains: Algebraic Bethe Ansatz Approach**

11:00 - 11:30 Kaffeepause

11:30 - 12:20 **Frank Göhmann**

### **The Hubbard Chain - A Paradigmatic Integrable Model**

12:20 - 13:10 **Joe Polchinski**

### **AdS/CFT and Integrability**

13:10 - 15:00 Mittagspause

15:00 - 18:30

### **Marcel Grossmann Meeting 11**

15:00 - Joe Minahan: Magnons in Gauge and String Theories

15:30 - Matthias Staudacher: Integrability, Transcendentality, and the AdS/CFT Correspondence

16:00 - Niklas Beisert: The S-Matrix of Planar AdS/CFT

16:30 - KAFFEPAUSE

17:00 - Emery Sokatchev: Four-Point Correlators in AdS/CFT: Old and New Facts

17:30 - David A. Kosower: On-Shell Methods in Field Theory

18:00 - Alexios Polychronakos: Calogero Fermions and N=4 SYM

18:30 - ENDE

28.7.2006

10:10 - 11:00 **Gleb Arutyunov**

### **On the AdS5 x S5 String S-Matrix**

11:00 - 11:30 Kaffeepause

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11:30 - 12:20 **Abhishek Agarwal**

**D-Branes and Integrability**

12:20 - 13:10 **Nadav Drukker**

**Comments on Wilson Loops**

13:10 - 15:00 Mittagspause

15:00 - 15:50 **Marija Zamaklar**

**Finite-Size Effects from Giant Magnon**

15:50 - 16:40 **Vladimir Kazakov**

**Integrable Sigma Models Related to AdS/CFT**

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