Exact computations in AdS/CFT

Report of Contributions
Spontaneous Conformal Symmetry Breaking in Fishnet CFT

Monday, 19 August 2019 10:30 (50 minutes)

Presenter: KAZAKOV, Vladimir (Laboratoire de Physique Theorique)
A New Class of Integrable Field Theories

*Monday, 19 August 2019 11:20 (50 minutes)*

**Presenter:** Prof. YAMAZAKI, Masahito (Kavli IPMU, University of Tokyo)
AdS black holes and deconfinement

Tuesday, 20 August 2019 10:30 (50 minutes)

Presenter: KIM, Seok
Five-Point Function of N=4 SYM from IIB Supergravity

Tuesday, 20 August 2019 11:20 (50 minutes)

Presenter: Dr ZHOU, Xinan (Princeton University)
T_N, Toda and Topological strings

Wednesday, 21 August 2019 09:30 (50 minutes)

Presenter: POMONI, Elli
Exact AdS/CFT duality from the worldsheet I

*Wednesday, 21 August 2019 10:50 (50 minutes)*

**Presenter:** GABERDIEL, Matthias (ETHZ - ETH Zurich)
Exact AdS/CFT duality from the worldsheet II

Wednesday, 21 August 2019 11:40 (50 minutes)

Presenter: Dr EBERHARDT, Lorenz (ETH)
Integrability and Renormalization under T Tbar

*Thursday, 22 August 2019 10:30* (50 minutes)

**Presenter:** Dr ROSENHAUS, Vladimir (IAS)
Exact Matrix Product States and other exact holography inspired constructions

Thursday, 22 August 2019 11:20 (50 minutes)

Presenter: JANIK, Romuald
Surface operators in the 6d $N= (2,0)$ theory

Friday, 23 August 2019 10:30 (50 minutes)

Presenter:  DRUKKER, Nadav (Humboldt University)
Applying twists to holography

Friday, 23 August 2019 11:20 (50 minutes)

Presenter: Dr ISHTIAQUE, Nafiz (Perimeter Institute)
Exact perturbative results for the Lieb-Liniger and Gaudin-Yang models

Presenter: MARINO BEIRAS, Marcos
Contribution ID: 13

Type: not specified

TBA

Presenter: PENATI, Silvia (University of Milano-Bicocca)
Holography and Supersymmetric Localization: An Amalgam of Exact Results

Monday, 26 August 2019 09:30 (50 minutes)

Presenter: Prof. BOBEV, Nikolay (KU Leuven Association)
On QFT in dS

*Monday, 26 August 2019 10:50 (50 minutes)*

**Presenter:** Dr GORBENKO, Victor (NYU)
Flux Tube S-matrix Bootstrap

Tuesday, 27 August 2019 10:30 (50 minutes)

Presenter: PENEDONES, João (EPFL)
D-instantons and the non-perturbative completion of c=1 string theory

Tuesday, 27 August 2019 11:20 (50 minutes)

Presenter:  YIN, Xi (Harvard University)
From supergravity to localization (and maybe back) in $\mathcal{N}=2^*$ theory

Wednesday, 28 August 2019 09:30 (50 minutes)

Presenter: Prof. ZAREMBO, Konstantin (Nordita)
Holographic correlators and supersymmetric localization

Wednesday, 28 August 2019 10:50 (50 minutes)

Presenter:  Prof. PUFU, Silviu (Princeton University)
Exact null octagon

Wednesday, 28 August 2019 11:40 (50 minutes)

Presenter: Prof. KORCHEMSKY, Gregory (saclay)
On Numbers and Functions in Quantum Field Theory

Thursday, 29 August 2019 10:30 (50 minutes)

Presenter: Dr WILHELM, Matthias (NBIA)
Structure constants at strong coupling from hexagons

Thursday, 29 August 2019 11:20 (50 minutes)

Presenter: Prof. BASSO, Benjamin (ENS Paris)
If we consider the S-matrix in a subspace of states (for example 2-particle states) and impose the general constraints of unitarity, crossing, analyticity and global symmetries, we find that the allowed space of S-matrices is convex. At the boundary of such convex space we find interesting points such as vertices where in some cases integrable models are located. Such vertices can be found by maximizing linear functionals.

In this talk I will consider the 2d O(N) integrable model and show that it indeed appears at a vertex of the space of allowed S-matrices, discuss how to visualize such space and introduce the so called dual minimization problem that allows to prove several interesting properties of this approach. In particular we show that we always obtain an S-matrix that saturates unitarity (no particle creation). It is an open problem to see if this method leads to interesting results for the world-sheet S-matrix (although the O(6) model is already of interest for AdS/CFT).

**Presenter:** Prof. KRUCZENSKI, Martin (Purdue University)
Maximal super Yang-Mills on spheres

Friday, 30 August 2019 11:20 (50 minutes)

Presenter: Prof. MINAHAN, Joseph (Uppsala University)
Coffee

Friday, 30 August 2019 09:45 (45 minutes)
Contribution ID: 26

Type: not specified

Coffee

Monday, 19 August 2019 09:45 (45 minutes)
Coffee

Tuesday, 20 August 2019 09:45 (45 minutes)
Coffee

Wednesday, 21 August 2019 10:20 (30 minutes)
Coffee

Thursday, 22 August 2019 09:45 (45 minutes)
Coffee

Friday, 23 August 2019 09:45 (45 minutes)
Coffee

Monday, 26 August 2019 10:20 (30 minutes)
Coffee

Tuesday, 27 August 2019 09:45 (45 minutes)
Coffee

Wednesday, 28 August 2019 10:20 (30 minutes)
Coffee

*Thursday, 29 August 2019 09:45 (45 minutes)*
Contribution ID: 35

Type: not specified

TBA

Presenter: PENATI, Silvia (University of Milano-Bicocca)
BPS Wilson loops in AdS4/CFT3

Monday, 26 August 2019 11:40 (50 minutes)

Presenter: PENATI, Silvia (University of Milano-Bicocca)
Dinner

Wednesday, 28 August 2019 19:00 (1 hour)