

String Theory Journal Club

General info

Journal clubs are on Tuesdays from 13 to 14 in Seminar Room 3 (building 1).

Feel free to suggest papers in the comments section. Note that you can also add attachments and comment on other people's suggestions.

Important: You need to login to see and add comments.

Spring/Summer semester 2019

Journal club 10-12-2019

- Fabrizio del Monte (SISSA), TBA.

Journal club 03-12-2019

- Jack Foster (Southampton University), TBA.

Journal club 26-11-2019

- Francesco Galvano (Torino): Wilson loops in N=2 SuperConformal Field theories (Note that this seminar **will be in Seminar room 07a**)

Abstract: The partition function of a four dimensional N=2 Super Yang-Mills theory can be mapped to a matrix model on a sphere using supersymmetric localization. We write it in a superconformal case, playing with the matter content in different representations of the gauge group. In this set-up we compute the vacuum expectation value a 1/2 BPS Maldacena-Wilson loop and we mention possible holographic consequences of this achievement. Finally, we discuss how the localization approach in presence of Wilson loops can capture other interesting observables, such as chiral correlators and the stress tensor one point function, up to a geometry deformation.

Journal club 05-11-2019

- Yuta Sekiguchi (U. Bern, AEC), TBA.

Journal club 29-10-2019

- Till Bargheer.

Journal club 15-10-2019

- Sylvain Lacroix, [Gauge Theory And Integrability, III](#) (focusing on the second part about "disorder defects").

Journal club 08-10-2019

- Alessandro Pini, [Extremal Correlators and Random Matrix Theory](#).

Journal club 17-09-2019

- Ilija Buric, [Modular Bootstrap, Elliptic Points, and Quantum Gravity](#)

Journal club 10-09-2019

- Philipp Tonsch, [The Conformal Bootstrap at Finite Temperature](#)

Journal club 06-08-2019

- Niklas Henke, [Tropical Grassmannians, cluster algebras and scattering amplitudes](#)

Journal club 02-07-2019

- Aleix Gimenez, [More Analytic Bootstrap: Nonperturbative Effects and Fermions](#)

Journal club 25-06-2019

- Nikolay Bobev, [How to Embrace a Naked Singularity](#)

Journal club 18-06-2019

- Mikhail Isachenkov, Solving large N double-scaled SYK

Abstract: I will review a method to evaluate correlation functions of certain statistical systems via chord diagrams and apply it to compute correlators in the double-scaled version of SYK model, in particular in its large N limit. The results are exact at all energies and allow to extract corrections to the maximal Lyapunov exponent. Time permitting, I will comment on the suggested relation of this model to a Hamiltonian reduction of quantum particle moving on the non-compact quantum group $SU_q(1,1)$.

Journal club 11-06-2019

- Alessandro Pini, [Black holes in 4d N=4 Super-Yang-Mills](#)

Journal club 04-06-2019 (cancelled)

Journal club 28-05-2019

- Lorenzo Quintavalle, [Scattering Amplitudes For All Masses and Spins](#)
- Georgios Papathanasiou, [Energy-energy correlations at next-to-next-to-leading order](#).
 - Extra references: ...

Journal club 21-05-2019

- Ilija Buric, [Superconformal Blocks: General Theory](#)

Journal club 14-05-2019

- Pedro Liendo, [Sphere Packing and Quantum Gravity part 1](#)
- Volker Schomerus, [Sphere Packing and Quantum Gravity part 2](#)
- Fabrizio Nieri, Overview on localization

Journal club 16-04-2019

- Enrico Olivucci, ["Spin Calogero-Moser on symmetric spaces"](#)

Journal club 09-04-2019

- Niklas Beisert, ["Yangian Symmetry of Planar N=4 SYM and Wilson Loops"](#)

Journal club 03-04-2019

- Antoine Bourget, ["Brane webs and the SQCD Higgs Branch"](#)

Journal club 27-03-2019

- Philipp Rösch, ["Elliptic Polylogarithms for Feynman integrals"](#)