

# **Amplitudes 2018**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Conference Dinner

*Wednesday, June 20, 2018 7:00 PM (3 hours)*

Contribution ID: 2

Type: **not specified**

## **Public Lecture: The End of Spacetime**

*Tuesday, June 19, 2018 7:30 PM (1 hour)*

**Author:** ARKANI-HAMED, Nima (IAS)

**Presenter:** ARKANI-HAMED, Nima (IAS)

Contribution ID: 3

Type: **not specified**

## Free Afternoon

*Thursday, June 21, 2018 2:50 PM (3h 10m)*

Contribution ID: 4

Type: **not specified**

## **The New Era of Precision Gravitational-Wave (astro)Physics**

*Monday, June 18, 2018 9:15 AM (45 minutes)*

**Author:** BUONANNO, Alessandra (Max Planck Inst., Potsdam)

**Presenter:** BUONANNO, Alessandra (Max Planck Inst., Potsdam)

**Session Classification:** Plenary

Contribution ID: 5

Type: **not specified**

## **Diagrammatic approach to two-body dynamics and post-Newtonian corrections**

*Monday, June 18, 2018 10:00 AM (35 minutes)*

**Author:** MASTROLIA, Pierpaolo (University of Padua)

**Presenter:** MASTROLIA, Pierpaolo (University of Padua)

**Session Classification:** Plenary

Contribution ID: 6

Type: **not specified**

## Welcome

*Monday, June 18, 2018 9:00 AM (15 minutes)*

**Presenter:** HEWETT, JoAnne (SLAC)

Contribution ID: 7

Type: **not specified**

## Scattering Amplitudes and LIGO

*Monday, June 18, 2018 11:15 AM (45 minutes)*

**Author:** CHEUNG, Clifford (Caltech)

**Presenter:** CHEUNG, Clifford (Caltech)

**Session Classification:** Plenary



Contribution ID: 8

Type: **not specified**

## Amplitudes for Fast Classical Scattering

*Monday, June 18, 2018 12:00 PM (35 minutes)*

**Author:** O'CONNELL, Donal (University of Edinburgh)

**Presenter:** O'CONNELL, Donal (University of Edinburgh)

**Session Classification:** Plenary

Contribution ID: 9

Type: **not specified**

## All-loop singularities of massless planar amplitudes

*Monday, June 18, 2018 2:50 PM (45 minutes)*

**Author:** SPRADLIN, Mark (Brown University)

**Presenter:** SPRADLIN, Mark (Brown University)

**Session Classification:** Plenary

Contribution ID: **10**

Type: **not specified**

## **The Hepp bound for Feynman periods**

*Monday, June 18, 2018 3:35 PM (35 minutes)*

**Author:** PANZER, Erik (Oxford University)

**Presenter:** PANZER, Erik (Oxford University)

**Session Classification:** Plenary

Contribution ID: 11

Type: **not specified**

## **Cosmic Galois Theory in Planar N=4 SYM**

*Monday, June 18, 2018 4:50 PM (35 minutes)*

**Author:** MCLEOD, Andrew (Niels Bohr Institute)

**Presenter:** MCLEOD, Andrew (Niels Bohr Institute)

**Session Classification:** Plenary

Contribution ID: 12

Type: **not specified**

## **Form factors in N=4 SYM and beyond**

*Monday, June 18, 2018 5:25 PM (35 minutes)*

**Author:** PENANTE, Brenda (CERN)

**Presenter:** PENANTE, Brenda (CERN)

**Session Classification:** Plenary

Contribution ID: 13

Type: **not specified**

## **Amplituhedron meets Jeffrey-Kirwan Residue**

*Tuesday, June 19, 2018 9:15 AM (45 minutes)*

**Author:** LUKOWSKI, Tomasz (Oxford University)

**Presenter:** LUKOWSKI, Tomasz (Oxford University)

**Session Classification:** Plenary

Contribution ID: 14

Type: **not specified**

## **The space of EFT and CFT: life behind the facets of cyclic polytopes**

*Tuesday, June 19, 2018 10:00 AM (35 minutes)*

**Author:** HUANG, Yu-tin (National Taiwan University)

**Presenter:** HUANG, Yu-tin (National Taiwan University)

**Session Classification:** Plenary

Contribution ID: 15

Type: **not specified**

## Scattering Amplitudes From Combinatorial Geometry At Infinity

*Tuesday, June 19, 2018 11:15 AM (45 minutes)*

**Author:** ARKANI-HAMED, Nima (IAS)

**Presenter:** ARKANI-HAMED, Nima (IAS)

**Session Classification:** Plenary



Contribution ID: 16

Type: **not specified**

## Positive Geometries, Canonical Forms and Scattering Amplitudes

*Tuesday, June 19, 2018 12:00 PM (35 minutes)*

**Author:** HE, Song (Beijing Institute of Theoretical Physics)

**Presenter:** HE, Song (Beijing Institute of Theoretical Physics)

**Session Classification:** Plenary

Contribution ID: 17

Type: **not specified**

## **From amplitudes to precision collider physics**

*Tuesday, June 19, 2018 2:50 PM (45 minutes)*

**Author:** GEHRMANN, Thomas (University of Zurich)

**Presenter:** GEHRMANN, Thomas (University of Zurich)

**Session Classification:** Plenary

Contribution ID: 18

Type: **not specified**

## **Integrands and amplitudes for two-loop five-point scattering in QCD**

*Tuesday, June 19, 2018 3:35 PM (35 minutes)*

**Author:** BADGER, Simon (University of Durham)

**Presenter:** BADGER, Simon (University of Durham)

**Session Classification:** Plenary

Contribution ID: 19

Type: **not specified**

## Computing two-loop amplitudes with numerical unitarity

*Tuesday, June 19, 2018 4:50 PM (35 minutes)*

**Author:** FEBRES CORDERO, Fernando (University of Freiburg)

**Presenter:** FEBRES CORDERO, Fernando (University of Freiburg)

**Session Classification:** Plenary

Contribution ID: 20

Type: **not specified**

## **Integration-by-parts reductions from algebraic geometry**

*Tuesday, June 19, 2018 5:25 PM (35 minutes)*

**Author:** LARSEN, Kasper (University of Southampton)

**Presenter:** LARSEN, Kasper (University of Southampton)

**Session Classification:** Plenary

Contribution ID: 21

Type: **not specified**

## Exact scattering amplitudes in gamma-deformed $N=4$ SYM

*Wednesday, June 20, 2018 9:15 AM (45 minutes)*

**Author:** KORCHEMSKY, Gregory (Saclay)

**Presenter:** KORCHEMSKY, Gregory (Saclay)

**Session Classification:** Plenary

Contribution ID: 22

Type: **not specified**

## Intersections

*Wednesday, June 20, 2018 10:00 AM (35 minutes)*

**Author:** MIZERA, Sebastian (Perimeter Institute)

**Presenter:** MIZERA, Sebastian (Perimeter Institute)

**Session Classification:** Plenary

Contribution ID: 23

Type: **not specified**

## Soft theorem and its classical limit

*Wednesday, June 20, 2018 11:15 AM (45 minutes)*

**Author:** SEN, Ashoke (Harish-Chandra Research Institute)

**Presenter:** SEN, Ashoke (Harish-Chandra Research Institute)

**Session Classification:** Plenary



Contribution ID: 24

Type: **not specified**

## **Double copy and color-kinematics on curved backgrounds**

*Wednesday, June 20, 2018 12:00 PM (35 minutes)*

**Author:** ADAMO, Tim (Imperial College)

**Presenter:** ADAMO, Tim (Imperial College)

**Session Classification:** Plenary

Contribution ID: 25

Type: **not specified**

## Recent developments in string amplitudes

*Wednesday, June 20, 2018 2:50 PM (45 minutes)*

**Author:** SCHLOTTERER, Oliver (MPI Potsdam)

**Presenter:** SCHLOTTERER, Oliver (MPI Potsdam)

**Session Classification:** Plenary

Contribution ID: 26

Type: **not specified**

## Two-loop amplitudes from the nodal Riemann sphere

*Wednesday, June 20, 2018 3:35 PM (35 minutes)*

**Author:** GEYER, Yvonne (IAS)

**Presenter:** GEYER, Yvonne (IAS)

**Session Classification:** Plenary

Contribution ID: 27

Type: **not specified**

## **Maximal Supergravity at 5 loops via Generalized Double-Copy**

*Wednesday, June 20, 2018 4:50 PM (35 minutes)*

**Author:** CARRASCO, John Joseph (CEA Saclay)

**Presenter:** CARRASCO, John Joseph (CEA Saclay)

**Session Classification:** Plenary

Contribution ID: 28

Type: **not specified**

## Calculating supergravity divergences at high loop orders

*Wednesday, June 20, 2018 5:25 PM (35 minutes)*

**Author:** ZENG, Mao (UCLA)

**Presenter:** ZENG, Mao (UCLA)

**Session Classification:** Plenary

Contribution ID: 29

Type: **not specified**

## Light-ray operators in conformal field theory

**Author:** SIMMONS-DUFFIN, David (IAS)

**Presenter:** SIMMONS-DUFFIN, David (IAS)

Contribution ID: **30**

Type: **not specified**

## **Light-ray operators in conformal field theory**

*Thursday, June 21, 2018 9:15 AM (45 minutes)*

**Author:** SIMMONS-DUFFIN, David (Caltech)

**Presenter:** SIMMONS-DUFFIN, David (Caltech)

**Session Classification:** Plenary

Contribution ID: 31

Type: **not specified**

## Analytic bootstrap for large N theories

*Thursday, June 21, 2018 10:00 AM (35 minutes)*

**Author:** BISSI, Agnese (University of Uppsala)

**Presenter:** BISSI, Agnese (University of Uppsala)

**Session Classification:** Plenary



Contribution ID: 32

Type: **not specified**

## **Continuum limit of fishnet graphs and AdS sigma model**

*Thursday, June 21, 2018 11:15 AM (45 minutes)*

**Author:** BASSO, Benjamin (Ecole Normale Superieure)

**Presenter:** BASSO, Benjamin (Ecole Normale Superieure)

**Session Classification:** Plenary

Contribution ID: 33

Type: **not specified**

## **ABJM flux-tube and scattering amplitudes**

*Thursday, June 21, 2018 12:00 PM (35 minutes)*

**Author:** BELITSKY, Andrei (Arizona State University)

**Presenter:** BELITSKY, Andrei (Arizona State University)

**Session Classification:** Plenary

Contribution ID: 34

Type: **not specified**

## Elliptic polylogarithms for Feynman integrals

*Friday, June 22, 2018 9:15 AM (45 minutes)*

**Author:** DUHR, Claude (CERN & Universite Catholique de Louvain)

**Presenter:** DUHR, Claude (CERN & Universite Catholique de Louvain)

**Session Classification:** Plenary

Contribution ID: 35

Type: **not specified**

## A tale of two Regge limits

*Friday, June 22, 2018 10:00 AM (35 minutes)*

**Author:** DEL DUCA, Vittorio (ETH Zurich)

**Presenter:** DEL DUCA, Vittorio (ETH Zurich)

**Session Classification:** Plenary

Contribution ID: 36

Type: **not specified**

## **Maximally supersymmetric black holes don't precess**

*Friday, June 22, 2018 11:15 AM (45 minutes)*

**Author:** CARON-HUOT, Simon (McGill University)

**Presenter:** CARON-HUOT, Simon (McGill University)

**Session Classification:** Plenary

Contribution ID: 37

Type: **not specified**

## **Simplicity in AdS Perturbative Dynamics**

*Friday, June 22, 2018 12:00 PM (35 minutes)*

**Author:** YUAN, Ellis (IAS)

**Presenter:** YUAN, Ellis (IAS)

**Session Classification:** Plenary

Contribution ID: **38**

Type: **not specified**

## Cuts and coaction of Feynman integrals

*Friday, June 22, 2018 2:50 PM (45 minutes)*

**Author:** BRITTO, Ruth (Trinity College, Dublin)

**Presenter:** BRITTO, Ruth (Trinity College, Dublin)

**Session Classification:** Plenary

Contribution ID: 39

Type: **not specified**

## Linearizing Loop Integration

*Friday, June 22, 2018 3:35 PM (35 minutes)*

**Author:** BOURJAILY, Jacob (Niels Bohr Institute)

**Presenter:** BOURJAILY, Jacob (Niels Bohr Institute)

**Session Classification:** Plenary



Contribution ID: 40

Type: **not specified**

# Quantum Gravity from Conformal Field Theory

*Friday, June 22, 2018 4:10 PM (35 minutes)*

**Author:** DRUMMOND, James (University of Southampton)

**Presenter:** DRUMMOND, James (University of Southampton)

**Session Classification:** Plenary

Contribution ID: 41

Type: **not specified**

## Poster Session

*Wednesday, June 20, 2018 6:00 PM (1 hour)*

Contribution ID: 42

Type: **not specified**

## Poster Setup

*Wednesday, June 20, 2018 8:45 AM (30 minutes)*

Contribution ID: 43

Type: **not specified**

## Amplitudes 2019

*Thursday, June 21, 2018 12:35 PM (5 minutes)*

**Author:** BRITTO, Ruth (University of Amsterdam)

**Presenter:** BRITTO, Ruth (University of Amsterdam)