

MathemAmplitudes 2023: QFT at the Computational Frontier

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome Talk-2

Monday, 25 September 2023 09:10 (10 minutes)

Presenter: MASIERO, Antonio

Session Classification: Session

Contribution ID: 2

Type: **not specified**

Computational tools for amplitudes in full-color QCD

Monday, 25 September 2023 09:30 (30 minutes)

Presenter: V MANTEUFFEL, Andreas

Session Classification: Session

Contribution ID: 3

Type: **not specified**

Reduction of symbolic propagator powers in Kira

Presenter: USOVITSCH, Johann

Session Classification: Session

Contribution ID: 4

Type: **not specified**

Pfd-parallel and NeatIBP, two packages to shorten rational functions and IBP linear systems

Monday, 25 September 2023 11:00 (30 minutes)

Presenter: ZHANG, Yang

Session Classification: Session

Contribution ID: 5

Type: **not specified**

Differential Equations and Hypergeometric Systems

Monday, 25 September 2023 12:00 (30 minutes)

Presenter: CHESTNOV, Seva

Session Classification: Session

Contribution ID: 6

Type: **not specified**

Series expansion of multivariate hypergeometric series around its integer-valued parameters

Monday, 25 September 2023 14:30 (30 minutes)

Presenter: BERA, Souvik

Session Classification: Session

Contribution ID: 7

Type: **not specified**

Principal Landau Determinants, part I

Monday, 25 September 2023 15:00 (30 minutes)

Presenter: FEVOLA, Claudia

Session Classification: Session

Contribution ID: 8

Type: **not specified**

Principal Landau Determinants, part II

Monday, 25 September 2023 15:30 (30 minutes)

Presenter: TELEN, Simon

Session Classification: Session

Contribution ID: 9

Type: **not specified**

Welcome

Tuesday, 26 September 2023 17:50 (10 minutes)

Presenter: ZWIRNER, Fabio

Session Classification: Session

Contribution ID: **10**

Type: **not specified**

Algorithms for computing three-loop Feynman integrals in Higgs plus jet production

Monday, 25 September 2023 11:30 (30 minutes)

Presenter: TORRES BOBADILLA, William

Session Classification: Session

Contribution ID: 11

Type: **not specified**

Symbol Alphabets from the Landau Singular Locus

Monday, 25 September 2023 16:30 (30 minutes)

Presenter: DLAPA, Christoph

Session Classification: Session

Contribution ID: 12

Type: **not specified**

Mathematical and Physical Structures of Rational Functions in Scattering Amplitudes

Monday, 25 September 2023 17:00 (30 minutes)

Presenter: DE LAURENTIS, Giuseppe

Session Classification: Session

Contribution ID: 13

Type: **not specified**

Feynman integrals reduction using Blade

Tuesday, 26 September 2023 09:00 (30 minutes)

Presenter: MA, Yan-Qing

Session Classification: Session

Contribution ID: 14

Type: **not specified**

A new method for the reconstruction of rational functions

Tuesday, 26 September 2023 09:30 (30 minutes)

Presenter: LIU, Xiao

Session Classification: Session

Contribution ID: 15

Type: **not specified**

Generalizing Polylogarithms to Riemann Surfaces of Arbitrary Genus

Tuesday, 26 September 2023 10:00 (30 minutes)

Presenter: HIDDING, Martijn

Session Classification: Session

Contribution ID: 16

Type: **not specified**

Adding FUEL to FIRE for Faster IBP

Tuesday, 26 September 2023 11:00 (30 minutes)

Primary authors: MOKROV, Kirill; SMIRNOV, Alexander; ZENG, Mao

Presenter: ZENG, Mao

Session Classification: Session

Contribution ID: 17

Type: **not specified**

Tropical Feynman Integration in the Physical Region

Tuesday, 26 September 2023 11:30 (30 minutes)

Presenter: TELLANDER, Felix

Session Classification: Session

Contribution ID: 18

Type: **not specified**

Intersection Numbers, Polynomial Division and Relative Cohomology

Tuesday, 26 September 2023 12:00 (30 minutes)

Presenter: CRISANTI, Giulio

Session Classification: Session

Contribution ID: 19

Type: **not specified**

Intersection numbers & rational algorithms

Tuesday, 26 September 2023 14:30 (30 minutes)

Presenter: FONTANA, Gaia

Session Classification: Session

Contribution ID: 20

Type: **not specified**

Cosmology Meets Cohomology

Tuesday, 26 September 2023 15:00 (30 minutes)

Presenter: POKRAKA, Andrzej

Session Classification: Session

Contribution ID: 21

Type: **not specified**

Lattice Correlation Functions from Differential Equations

Tuesday, 26 September 2023 15:30 (30 minutes)

Presenter: GASPAROTTO, Federico

Session Classification: Session

Contribution ID: 22

Type: **not specified**

Improving Integration and by Building Better Integrand Bases

Tuesday, 26 September 2023 16:00 (30 minutes)

Presenter: BOURJAILY, Jacob

Session Classification: Session

Contribution ID: 23

Type: **not specified**

2-loop scattering amplitudes with massive internal particles

Wednesday, 27 September 2023 09:00 (30 minutes)

Presenter: CHAUBEY, Ekta

Session Classification: Session

Contribution ID: 24

Type: **not specified**

Function bases for canonical differential equations

Wednesday, 27 September 2023 09:30 (30 minutes)

Presenter: ZOIA, Simone

Session Classification: Session

Contribution ID: 25

Type: **not specified**

A semi-analytic method for one-scale Feynman integrals

Wednesday, 27 September 2023 10:00 (30 minutes)

Presenter: FAEL, Matteo

Session Classification: Session

Contribution ID: 26

Type: **not specified**

IBP Reduction using Gröbner bases

Wednesday, 27 September 2023 11:00 (30 minutes)

Presenter: HUBER, Tobias

Session Classification: Session

Contribution ID: 27

Type: **not specified**

Resultants and Difference equations

Wednesday, 27 September 2023 11:30 (30 minutes)

Presenter: LAPORTA, Stefano

Session Classification: Session

Contribution ID: 28

Type: **not specified**

New facets of pySecDec

Wednesday, 27 September 2023 12:00 (30 minutes)

Presenter: HEINRICH, Gudrun

Session Classification: Session

Contribution ID: 29

Type: **not specified**

From On-Shell Methods to Solving Scattering in Planar N=4 Super-Yang-Mills

Tuesday, 26 September 2023 18:00 (45 minutes)

Presenter: DIXON, Lance

Session Classification: Session

Contribution ID: **30**

Type: **not specified**

A Dialogue with Geometry

Tuesday, 26 September 2023 18:45 (45 minutes)

Presenter: KOSOWER, David

Session Classification: Session

Contribution ID: 31

Type: **not specified**

Welcome Talk-3

Monday, 25 September 2023 09:20 (10 minutes)

Presenter: MASTROLIA, Pierpaolo

Session Classification: Session

Contribution ID: 32

Type: **not specified**

Registration

Monday, 25 September 2023 08:45 (15 minutes)

Session Classification: Session

Contribution ID: 33

Type: **not specified**

Reduction of symbolic propagator powers in Kira

Monday, 25 September 2023 10:00 (30 minutes)

Presenter: USOVITSCH, Johann

Session Classification: Session

Contribution ID: 34

Type: **not specified**

Algorithms for computing three-loop Feynman integrals in Higgs plus jet production

Presenter: TORRES BOBADILLA, William

Session Classification: Session

Contribution ID: 35

Type: **not specified**

Welcome Talk-1

Monday, 25 September 2023 09:00 (10 minutes)

Presenter: SENO, Flavio

Session Classification: Session

Contribution ID: **36**

Type: **not specified**

Vote of Thanks

Wednesday, 27 September 2023 12:30 (10 minutes)

Presenter: MASIERO, Antonio

Session Classification: Session