

MathemAmplitudes 2023: QFT at the Computational Frontier

Monday, 25 September 2023

Session: Session 1 (08:45 - 10:30)

time	[id] title	presenter
08:45	[32] Registration	
09:00	[35] Welcome Talk-1	SENO, Flavio
09:10	[1] Welcome Talk-2	MASIERO, Antonio
09:20	[31] Welcome Talk-3	MASTROLIA, Pierpaolo
09:30	[2] Computational tools for amplitudes in full-color QCD	V MANTEUFFEL, Andreas
10:00	[33] Reduction of symbolic propagator powers in Kira	USOVITSCH, Johann

Session: Session 2 (11:00 - 12:30)

time	[id] title	presenter
11:00	[4] Pfd-parallel and NeatIBP, two packages to shorten rational functions and IBP linear systems	ZHANG, Yang
11:30	[10] Algorithms for computing three-loop Feynman integrals in Higgs plus jet production	TORRES BOBADILLA, William
12:00	[5] Differential Equations and Hypergeometric Systems	CHESTNOV, Seva

Session: Session 3 (14:30 - 16:00)

time	[id] title	presenter
14:30	[6] Series expansion of multivariate hypergeometric series around its integer-valued parameters	BERA, Souvik
15:00	[7] Principal Landau Determinants, part I	FEVOLA, Claudia
15:30	[8] Principal Landau Determinants, part II	TELEN, Simon

Session: Session 4 (16:30 - 18:00)

time	[id] title	presenter
16:30	[11] Symbol Alphabets from the Landau Singular Locus	DLAPA, Christoph
17:00	[12] Mathematical and Physical Structures of Rational Functions in Scattering Amplitudes	DE LAURENTIS, Giuseppe

Tuesday, 26 September 2023

Session: Session 1 (09:00 - 10:30)

time	[id] title	presenter
09:00	[13] Feynman integrals reduction using Blade	MA, Yan-Qing
09:30	[14] A new method for the reconstruction of rational functions	LIU, Xiao
10:00	[15] Generalizing Polylogarithms to Riemann Surfaces of Arbitrary Genus	HIDDING, Martijn

Session: Session 2 (11:00 - 12:30)

time	[id] title	presenter
11:00	[16] Adding FUEL to FIRE for Faster IBP	ZENG, Mao
11:30	[17] Tropical Feynman Integration in the Physical Region	TELLANDER, Felix
12:00	[18] Intersection Numbers, Polynomial Division and Relative Cohomology	CRISANTI, Giulio

Session: Session 3 (14:30 - 16:00)

time	[id] title	presenter
14:30	[19] Intersection numbers & rational algorithms	FONTANA, Gaia
15:00	[20] Cosmology Meets Cohomology	POKRAKA, Andrzej
15:30	[21] Lattice Correlation Functions from Differential Equations	GASPAROTTO, Federico

Session: Session 4 (16:00 - 16:30)

time	[id] title	presenter
16:00	[22] Improving Integration and by Building Better Integrand Bases	BOURJAILY, Jacob

Session: Galilean Lecture (17:30 - 19:30)

time	[id] title	presenter
17:50	[9] Welcome	ZWIRNER, Fabio
18:00	[29] From On-Shell Methods to Solving Scattering in Planar N=4 Super-Yang-Mills	DIXON, Lance
18:45	[30] A Dialogue with Geometry	KOSOWER, David

Wednesday, 27 September 2023

Session: Session 1 (09:00 - 10:30)

time	[id] title	presenter
09:00	[23] 2-loop scattering amplitudes with massive internal particles	CHAUBEY, Ekta
09:30	[24] Function bases for canonical differential equations	ZOIA, Simone
10:00	[25] A semi-analytic method for one-scale Feynman integrals	FAEL, Matteo

Session: Session 2 (11:00 - 12:40)

time	[id] title	presenter
11:00	[26] IBP Reduction using Gröbner bases	HUBER, Tobias
11:30	[27] Resultants and Difference equations	LAPORTA, Stefano
12:00	[28] New facets of pySecDec	HEINRICH, Gudrun
12:30	[36] Vote of Thanks	MASIERO, Antonio