

RADCOR-LoopFest 2021

Report of Contributions

Contribution ID: 1

Type: **not specified**

test

Session Classification: Monday Plenary I

Contribution ID: 2

Type: **not specified**

Welcome

Monday, May 17, 2021 8:00 AM (10 minutes)

Presenter: THE ORGANIZERS (FSU)

Session Classification: Monday Plenary I

Contribution ID: 3

Type: **not specified**

Physics at the Precision Frontier: Then, Now, and Tomorrow

Monday, May 17, 2021 8:15 AM (40 minutes)

Presenter: PROSPER, Harrison B. (FSU)

Session Classification: Monday Plenary I

Contribution ID: 4

Type: **not specified**

New frontiers in the determination of PDFs at the LHC

Monday, May 17, 2021 9:00 AM (25 minutes)

Presenter: UBIALI, Maria

Session Classification: Monday Plenary I

Contribution ID: 5

Type: **not specified**

The interplay between the muon ($g-2$) and EW precision fits

Monday, May 17, 2021 9:30 AM (25 minutes)

Presenter: PASSERA, Massimo (INFN Padova)

Session Classification: Monday Plenary I

Contribution ID: 6

Type: **not specified**

Two-Loop renormalization of QCD operators and Higgs EFT amplitudes

Monday, May 17, 2021 10:30 AM (25 minutes)

Presenter: Prof. YANG, Gang (Institute of Theoretical Physics, CAS)

Session Classification: Monday Plenary II

Contribution ID: 7

Type: **not specified**

Double Virtual Contributions for Massless $2 \rightarrow 3$ Scattering in NNLO QCD

Monday, May 17, 2021 11:00 AM (25 minutes)

Presenter: Dr SOTNIKOV, Vasily (Max Planck Institute for Physics)

Session Classification: Monday Plenary II

Contribution ID: 8

Type: **not specified**

Mixed QCD-EW corrections to W- and Z-boson production and their impact on the W-mass measurement

Monday, May 17, 2021 11:30 AM (25 minutes)

Presenter: BEHRING, Arnd (Karlsruhe Institute of Technology (KIT))

Session Classification: Monday Plenary II

Contribution ID: 9

Type: **not specified**

Single-top-quark production in the t-channel at NNLO

Monday, May 17, 2021 12:00 PM (25 minutes)

Presenter: NEUMANN, Tobias (Brookhaven National Laboratory)

Session Classification: Monday Plenary II

Contribution ID: **10**

Type: **not specified**

Multiscale pentagon integrals to all orders

Monday, May 17, 2021 2:30 PM (25 minutes)

Presenter: SYRRAKOS, Nikolaos (NCSR DEMOKRITOS)

Session Classification: Monday Parallel III.A

Contribution ID: 11

Type: **not specified**

Background Field Method and Generalized Field Redefinitions in Effective Field Theories

Presenter: QUADRI, Andrea (INFN, Sez. di Milano)

Session Classification: Monday Parallel III.A

Contribution ID: 12

Type: **not specified**

The tropical approach to numerical Feynman integration

Monday, May 17, 2021 3:00 PM (25 minutes)

Presenter: BORINSKY, Michael (Nikhef)

Session Classification: Monday Parallel III.A

Contribution ID: 13

Type: **not specified**

Scale Evolution of the SMEFT dipole operators in the presence of an ALP

Presenter: GALDA, Anne (Johannes Gutenberg-University Mainz)

Session Classification: Monday Parallel III.A

Contribution ID: 14

Type: **not specified**

Background Field Method and Generalized Field Redefinitions in Effective Field Theories

Monday, May 17, 2021 2:30 PM (25 minutes)

Presenter: QUADRI, Andrea (INFN, Sez. di Milano)

Session Classification: Monday Parallel III.B

Contribution ID: 15

Type: **not specified**

Scale Evolution of the SMEFT dipole operators in the presence of an ALP

Monday, May 17, 2021 3:00 PM (25 minutes)

Presenter: GALDA, Anne (Johannes Gutenberg-University Mainz)

Session Classification: Monday Parallel III.B

Contribution ID: 16

Type: **not specified**

Renormalization of the flavor-singlet axial-vector current and its anomaly at N³LO in QCD

Monday, May 17, 2021 3:30 PM (25 minutes)

Primary author: Mr CHEN, Long (Max Planck Institute for Physics)

Presenters: CHEN, Long (RWTH Aachen University); Mr CHEN, Long (Max Planck Institute for Physics)

Session Classification: Monday Parallel III.B

Contribution ID: 17

Type: **not specified**

Operator mixing in massless QCD-like theories and Poincaré'-Dulac theorem

Monday, May 17, 2021 4:00 PM (25 minutes)

Presenter: BECCHETTI, Matteo (University of Torino)

Session Classification: Monday Parallel III.B

Contribution ID: **18**

Type: **not specified**

The diagrammatic coaction and cuts of the double box

Monday, May 17, 2021 3:30 PM (25 minutes)

Presenter: IOANNOU, Aris (The University of Edinburgh)

Session Classification: Monday Parallel III.A

Contribution ID: 19

Type: **not specified**

On the evaluation of two-loop electroweak box diagrams for $e^+ e^-$ to HZ production

Monday, May 17, 2021 4:00 PM (25 minutes)

Presenter: SONG, Qian (University of Pittsburgh)

Session Classification: Monday Parallel III.A

Contribution ID: 20

Type: **not specified**

3 Loop heavy flavor corrections to DIS Structure Functions

Tuesday, May 18, 2021 8:00 AM (25 minutes)

Presenter: Prof. BLUEMLEIN, Johannes (DESY)

Session Classification: Tuesday Parallel I.A

Contribution ID: 21

Type: **not specified**

The kinetic mass of heavy quarks to three loops

Tuesday, May 18, 2021 8:30 AM (25 minutes)

Presenter: Dr FAEL, Matteo (University of Siegen)

Session Classification: Tuesday Parallel I.A

Contribution ID: 22

Type: **not specified**

MSbar-onshell quark mass relation with two mass scales

Tuesday, May 18, 2021 9:00 AM (25 minutes)

Presenter: STEINHAUSER, Matthias (KIT)

Session Classification: Tuesday Parallel I.A

Contribution ID: 23

Type: **not specified**

New Results on Pions and Muons

Tuesday, May 18, 2021 9:30 AM (25 minutes)

Presenter: CZARNECKI, Andrzej

Session Classification: Tuesday Parallel I.A

Contribution ID: 24

Type: **not specified**

Mixed QCD × QED corrections to Drell-Yan and Higgs boson productions beyond SV at N³LO

Tuesday, May 18, 2021 8:00 AM (25 minutes)

Presenter: SANKAR, Aparna (IMSc, Chennai)

Session Classification: Tuesday Parallel I.B

Contribution ID: 25

Type: **not specified**

Power corrections to event shapes using eikonal dressed gluon exponentiation

Tuesday, May 18, 2021 8:30 AM (25 minutes)

Presenter: PAL, Sourav (IIT Hyderabad, India)

Session Classification: Tuesday Parallel I.B

Contribution ID: 26

Type: **not specified**

The role of NLP threshold corrections in dQCD and SCET

Tuesday, May 18, 2021 9:00 AM (25 minutes)

Presenter: VAN BEEKVELD, Melissa

Session Classification: Tuesday Parallel I.B

Contribution ID: 27

Type: **not specified**

On the difference between the FOPT and CIPT approach for the hadronic tau decay rate

Tuesday, May 18, 2021 9:30 AM (25 minutes)

Presenter: HOANG, Andre (University of Vienna)

Session Classification: Tuesday Parallel I.B

Contribution ID: 28

Type: **not specified**

Analytic representation of all planar two-loop five-point Master Integrals with one off-shell leg

Tuesday, May 18, 2021 11:30 AM (25 minutes)

Presenter: PAPAPOPOULOS, Konstantinos (Nat. Cent. for Sci. Res. Demokritos (GR))

Session Classification: Tuesday Parallel II.A

Contribution ID: 29

Type: **not specified**

(Semi-)automated numerical computation of multiloop Feynman integrals from differential equations

Tuesday, May 18, 2021 10:30 AM (25 minutes)

Presenter: HIDDING, Martijn (Uppsala University)

Session Classification: Tuesday Parallel II.A

Contribution ID: **30**

Type: **not specified**

Two-Loop Integrals for Five-Point One-Mass Scattering

Tuesday, May 18, 2021 11:00 AM (25 minutes)

Presenter: PAGE, Ben (CERN)

Session Classification: Tuesday Parallel II.A

Contribution ID: 31

Type: **not specified**

Evaluating planar master integrals for Bhabha scattering

Tuesday, May 18, 2021 12:00 PM (25 minutes)

Presenter: SMIRNOV, Vladimir (Moscow State University)

Session Classification: Tuesday Parallel II.A

Contribution ID: 32

Type: **not specified**

NNLO QCD predictions for $W+c$ -jet production at the LHC

Tuesday, May 18, 2021 2:30 PM (25 minutes)

Presenter: PELLEN, Mathieu (University of Freiburg)

Session Classification: Tuesday Parallel III.A

Contribution ID: 33

Type: **not specified**

Bottom-quark hadroproduction in NNLO QCD

Tuesday, May 18, 2021 3:00 PM (25 minutes)

Presenter: DEVOTO, Simone (UNIMI)

Session Classification: Tuesday Parallel III.A

Contribution ID: 34

Type: **not specified**

Predictions for Z boson production in association with a b-jet at α_s^3

Tuesday, May 18, 2021 3:30 PM (25 minutes)

Presenter: GAULD, Rhorry (Nikhef)

Session Classification: Tuesday Parallel III.A

Contribution ID: 35

Type: **not specified**

NNLO corrections to bottom-induced Higgs plus jet production

Tuesday, May 18, 2021 4:00 PM (25 minutes)

Presenter: WILLIAMS, Ciaran (SUNY Buffalo)

Session Classification: Tuesday Parallel III.A

Contribution ID: 36

Type: **not specified**

On the universality of the KRK factorization scheme and improved Catani-Seymour scheme

Tuesday, May 18, 2021 10:30 AM (25 minutes)

Presenter: JADACH, Staszek (Polish Academy of Sciences (PL))

Session Classification: Tuesday Parallel II.B

Contribution ID: 37

Type: **not specified**

New Developments in KKMC-hh: Quark-Level Exponentiated Radiative Corrections and Semi-analytical Results

Tuesday, May 18, 2021 11:00 AM (25 minutes)

Presenter: YOST, Scott Alan (The Citadel - The Military College of South Carolina (US))

Session Classification: Tuesday Parallel II.B

Contribution ID: **38**

Type: **not specified**

NNLO Photon Fragmentation within Antenna Subtraction

Tuesday, May 18, 2021 11:30 AM (25 minutes)

Presenter: SCHUERMANN, Robin (University of Zurich)

Session Classification: Tuesday Parallel II.B

Contribution ID: 39

Type: **not specified**

Fully differential photon production at LHC with N3LO QCD corrections

Tuesday, May 18, 2021 12:00 PM (25 minutes)

Presenter: CHEN, Xuan (University of Zurich)

Session Classification: Tuesday Parallel II.B

Contribution ID: 40

Type: **not specified**

Towards NNLO corrections to muon-electron scattering

Tuesday, May 18, 2021 2:30 PM (25 minutes)

Presenter: HASAN, Syed Mehedi (INFN Sezione di Pavia)

Session Classification: Tuesday Parallel III.B

Contribution ID: 41

Type: **not specified**

Top quark mass corrections to single and double Higgs boson production in gluon fusion

Tuesday, May 18, 2021 3:00 PM (25 minutes)

Presenter: DAVIES, Joshua

Session Classification: Tuesday Parallel III.B

Contribution ID: 42

Type: **not specified**

Some Leading Fermionic Three-Loop Corrections to Electroweak Precision Observables

Tuesday, May 18, 2021 3:30 PM (25 minutes)

Presenter: CHEN, Lisong

Session Classification: Tuesday Parallel III.B

Contribution ID: 43

Type: **not specified**

Light Quark Mediated Higgs Boson Threshold Production in the Next-to-Leading Logarithmic Approximation

Tuesday, May 18, 2021 4:00 PM (25 minutes)

Presenter: PENIN, Alexander (University of Alberta)

Session Classification: Tuesday Parallel III.B

Contribution ID: 44

Type: **not specified**

N3LO calculations for 2 to 2 processes using Simplified Differential Equations

Friday, May 21, 2021 8:00 AM (25 minutes)

Presenter: CANKO, Dhimiter (NSCR "Demokritos")

Session Classification: Friday Parallel I.A

Contribution ID: 45

Type: **not specified**

Di-scalar production in qqbar annihilation at 2 loops in perturbative QCD

Friday, May 21, 2021 8:30 AM (25 minutes)

Presenter: TIWARI, Surabhi (Institute of Mathematical Sciences)

Session Classification: Friday Parallel I.A

Contribution ID: 46

Type: **not specified**

Decoupage at 5 loops

Friday, May 21, 2021 9:00 AM (25 minutes)

Presenter: GEORGOUDIS, Alessandro (ENS Paris)

Session Classification: Friday Parallel I.A

Contribution ID: 47

Type: **not specified**

Two-loop Rational Terms

Friday, May 21, 2021 9:30 AM (25 minutes)

Presenter: ZHANG, Hantian (University of Zurich)

Session Classification: Friday Parallel I.A

Contribution ID: 48

Type: **not specified**

Apply NLP SCET in Higgs amplitudes induced by light quarks

Friday, May 21, 2021 8:00 AM (25 minutes)

Presenter: WANG, Xing

Session Classification: Friday Parallel I.B

Contribution ID: 49

Type: **not specified**

Next-to-soft virtual correction to differential cross section at LHC

Friday, May 21, 2021 8:30 AM (25 minutes)

Presenter: A H, Ajjath

Session Classification: Friday Parallel I.B

Contribution ID: 50

Type: **not specified**

Two-parton scattering in the high-energy limit: climbing two- and three-Reggeon ladders

Friday, May 21, 2021 9:00 AM (25 minutes)

Presenter: VERNAZZA, Leonardo (INFN, Torino)

Session Classification: Friday Parallel I.B

Contribution ID: 51

Type: **not specified**

Regge limit constraints for the soft anomalous dimension at four loops

Friday, May 21, 2021 9:30 AM (25 minutes)

Presenter: MAHER, Niamh (University of Edinburgh)

Session Classification: Friday Parallel I.B

Contribution ID: 52

Type: **not specified**

NNPDF4.0: The Structure of the Proton at 1% Precision

Friday, May 21, 2021 10:30 AM (25 minutes)

Presenter: GIANI, Tommaso

Session Classification: Friday Parallel II.A

Contribution ID: 53

Type: **not specified**

NLO EW corrections for a global PDF fit and PineAPPL

Friday, May 21, 2021 11:00 AM (25 minutes)

Presenter: Mr SCHWAN, Christopher (Università degli Studi di Milano)

Session Classification: Friday Parallel II.A

Contribution ID: 54

Type: **not specified**

PDF4LHC21: benchmarking for the LHC

Friday, May 21, 2021 11:30 AM (25 minutes)

Presenter: HUSTON, Joey (Michigan State University (US))

Session Classification: Friday Parallel II.A

Contribution ID: 55

Type: **not specified**

Amplitude Evolution beyond Leading Order

Friday, May 21, 2021 10:30 AM (25 minutes)

Presenter: PLATZER, Simon (University of Vienna (AT))

Session Classification: Friday Parallel II.B

Contribution ID: 56

Type: **not specified**

IR-Improved Amplitude-Based Resummation in Quantum Field Theory: New Developments and New Issues

Friday, May 21, 2021 11:00 AM (25 minutes)

Presenter: WARD, Bennie (Baylor University (US))

Session Classification: Friday Parallel II.B

Contribution ID: 57

Type: **not specified**

YFS Resummation in Sherpa

Presenter: PRICE, Alan (Siegen University)

Session Classification: Friday Parallel II.B

Contribution ID: 58

Type: **not specified**

Mixed EW-QCD helicity amplitudes for Drell-Yan lepton pair production

Friday, May 21, 2021 12:00 PM (25 minutes)

Presenter: VON MANTEUFFEL, Andreas (Michigan State University)

Session Classification: Friday Plenary II

Contribution ID: 59

Type: **not specified**

Two-loop leading-colour QCD helicity amplitudes for top-quark pair production in the gluon fusion channel

Friday, May 21, 2021 2:30 PM (25 minutes)

Presenter: CHAUBEY, Ekta (University of Turin)

Session Classification: Friday Plenary III

Contribution ID: **60**

Type: **not specified**

NNLO QCD predictions for 2 to 3 processes

Friday, May 21, 2021 3:00 PM (25 minutes)

Presenter: PONCELET, Rene (Cambridge University)

Session Classification: Friday Plenary III

Contribution ID: **61**

Type: **not specified**

From cross sections in colliders to gravitational wave observables

Friday, May 21, 2021 3:30 PM (25 minutes)

Presenter: PARRA-MARTINEZ, Julio (Caltech)

Session Classification: Friday Plenary III

Contribution ID: **62**

Type: **not specified**

Three-loop amplitudes in massless QCD

Friday, May 21, 2021 4:00 PM (25 minutes)

Presenter: TANCREDI, Lorenzo (University of Oxford (GB))

Session Classification: Friday Plenary III

Contribution ID: 63

Type: **not specified**

Top quark contribution to two-loop helicity amplitudes for W/Z boson pair production in gluon fusion

Wednesday, May 19, 2021 8:00 AM (25 minutes)

Presenter: WANG, Chen-Yu (TTP, KIT)

Session Classification: Wednesday Parallel I.A

Contribution ID: **64**

Type: **not specified**

Gluon-induced ZZ and ZH production at NLO

Wednesday, May 19, 2021 8:30 AM (25 minutes)

Presenter: MISHIMA, Go

Session Classification: Wednesday Parallel I.A

Contribution ID: 65

Type: **not specified**

2-loop helicity amplitudes for $gg \rightarrow ZZ$ with full top mass dependence

Wednesday, May 19, 2021 9:00 AM (25 minutes)

Presenter: AGARWAL, Bakul (Michigan State University)

Session Classification: Wednesday Parallel I.A

Contribution ID: 66

Type: **not specified**

A pitfall in applying a non-anticommuting γ_5 in $q\bar{q}$ to Z+Higgs amplitudes

Wednesday, May 19, 2021 9:30 AM (25 minutes)

Presenter: Dr AHMED, Taushif (University of Torino)

Session Classification: Wednesday Parallel I.A

Contribution ID: 67

Type: **not specified**

2-loop anti-kT jet function

Wednesday, May 19, 2021 8:00 AM (25 minutes)

Presenter: LIU, Hao-yu (Beijing Normal University)

Session Classification: Wednesday Parallel I.B

Contribution ID: 68

Type: **not specified**

Resumming next to leading power threshold corrections in QCD

Wednesday, May 19, 2021 8:30 AM (25 minutes)

Presenter: MUKHERJEE, Pooja (The Institute of Mathematical Sciences, India)

Session Classification: Wednesday Parallel I.B

Contribution ID: 69

Type: **not specified**

A consistent framework for the regularization of chiral theories in 4D: a two-loop study

Wednesday, May 19, 2021 9:00 AM (25 minutes)

Presenter: CHERCHIGLIA, Adriano (Universidade Federal do ABC)

Session Classification: Wednesday Parallel I.B

Contribution ID: 70

Type: **not specified**

Electric charge renormalization to all orders

Wednesday, May 19, 2021 9:30 AM (25 minutes)

Presenter: DITTMAYER, Stefan (Albert Ludwigs Universitaet Freiburg (DE))

Session Classification: Wednesday Parallel I.B

Contribution ID: 71

Type: **not specified**

Two-loop QCD corrections to Wbb production at hadron colliders

Wednesday, May 19, 2021 10:30 AM (25 minutes)

Presenter: HARTANTO, Heribertus Bayu (Cambridge University)

Session Classification: Wednesday Parallel II.A

Contribution ID: 72

Type: **not specified**

Two-loop helicity amplitudes for diphoton plus jet production in full color

Wednesday, May 19, 2021 11:00 AM (25 minutes)

Presenter: BUCCIONI, Federico (University of Oxford)

Session Classification: Wednesday Parallel II.A

Contribution ID: 73

Type: **not specified**

Two-loop QCD helicity amplitudes for 2->3 processes

Wednesday, May 19, 2021 11:30 AM (25 minutes)

Presenter: CHAWDHRY, Herschel (University of Oxford)

Session Classification: Wednesday Parallel II.A

Contribution ID: 74

Type: **not specified**

NNLO EW_xQCD corrections to on-shell Z production

Wednesday, May 19, 2021 12:00 PM (25 minutes)

Presenter: Dr RANA, Narayan (INFN Milan)

Session Classification: Wednesday Parallel II.A

Contribution ID: 75

Type: **not specified**

Geometry and causality for efficient multiloop representations

Wednesday, May 19, 2021 10:30 AM (25 minutes)

Presenter: SBORLINI, German (Università di Milano, INFN Milano and IFIC-Valencia)

Session Classification: Wednesday Parallel II.B

Contribution ID: 76

Type: **not specified**

Causal representation and numerical evaluation of multi-loop Feynman integrals

Wednesday, May 19, 2021 11:00 AM (25 minutes)

Presenter: Dr TORRES BOBADILLA, William J. (Max-Planck-Institute for Physics)

Session Classification: Wednesday Parallel II.B

Contribution ID: 77

Type: **not specified**

Numerical integration of one-loop integrals through local cancellation of threshold singularities

Wednesday, May 19, 2021 12:00 PM (25 minutes)

Presenter: KERMANSCHAH, Dario (ETH Zurich)

Session Classification: Wednesday Parallel II.B

Contribution ID: 78

Type: **not specified**

Local Unitarity and Infrared Safety

Wednesday, May 19, 2021 11:30 AM (25 minutes)

Presenter: CAPATTI, Zeno (ETH Zurich)

Session Classification: Wednesday Parallel II.B

Contribution ID: 79

Type: **not specified**

Two-loop amplitude generation in OpenLoops

Wednesday, May 19, 2021 2:30 PM (25 minutes)

Presenter: Dr ZOLLER, Max (PSI)

Session Classification: Wednesday Parallel III.A

Contribution ID: **80**

Type: **not specified**

Expansion by regions with pySecDec

Wednesday, May 19, 2021 3:00 PM (25 minutes)

Presenter: VILLA, Emilio (Karlsruhe Institute of Technology)

Session Classification: Wednesday Parallel III.A

Contribution ID: **81**

Type: **not specified**

Prospects for numerical calculation of massive multi-loop Feynman integrals using Mellin-Barnes representations

Wednesday, May 19, 2021 3:30 PM (25 minutes)

Presenter: DUBOVYK, Ievgen (University of Silesia (PL))

Session Classification: Wednesday Parallel III.A

Contribution ID: 82

Type: **not specified**

Integral Reduction with Kira 2 and Finite Field Methods

Wednesday, May 19, 2021 4:00 PM (25 minutes)

Presenters: USOVITSCH, Johann; USOVITSCH, Johann

Session Classification: Wednesday Parallel III.A

Contribution ID: 83

Type: **not specified**

NLO electroweak and QCD corrections to off-shell $t\bar{t}W$ production at the LHC

Wednesday, May 19, 2021 3:30 PM (25 minutes)

Presenters: PELLICCIOLI, Giovanni (Würzburg University); PELLICCIOLI, Giovanni (Würzburg University)

Session Classification: Wednesday Parallel III.B

Contribution ID: **84**

Type: **not specified**

NLO QCD corrections for off-shell $t\bar{t}b\bar{b}$

Wednesday, May 19, 2021 3:00 PM (25 minutes)

Presenter: LUPATTELLI, Michele (RWTH Aachen University)

Session Classification: Wednesday Parallel III.B

Contribution ID: 85

Type: **not specified**

Precision studies for Drell-Yan processes at NNLO

Wednesday, May 19, 2021 2:30 PM (25 minutes)

Presenter: MOCH, S. (UHH)

Session Classification: Wednesday Parallel III.B

Contribution ID: **86**

Type: **not specified**

On the QCD modelling of ttW signatures

Wednesday, May 19, 2021 4:00 PM (25 minutes)

Presenter: KRAUS, Manfred (Florida State University)

Session Classification: Wednesday Parallel III.B

Contribution ID: 87

Type: **not specified**

Time-like Transition Form Factor for CP-odd Higgs Boson Production

Thursday, May 20, 2021 8:00 AM (25 minutes)

Presenter: UEMATSU, Tsuneo

Session Classification: Thursday Parallel I.A

Contribution ID: **88**

Type: **not specified**

ZH production in gluon fusion: NLO corrections with full top quark mass dependence

Thursday, May 20, 2021 8:30 AM (25 minutes)

Presenter: KERNER, Matthias (University of Zürich)

Session Classification: Thursday Parallel I.A

Contribution ID: 89

Type: **not specified**

Full NLO predictions for ZZ scattering and its irreducible background at the LHC

Thursday, May 20, 2021 9:00 AM (25 minutes)

Presenter: SCHMIDT, Timo (University of Wuerzburg)

Session Classification: Thursday Parallel I.A

Contribution ID: **90**

Type: **not specified**

Calculation of NLO cross sections for opposite-sign WW scattering

Thursday, May 20, 2021 9:30 AM (25 minutes)

Presenter: FRANKEN, Robert (JMU Würzburg)

Session Classification: Thursday Parallel I.A

Contribution ID: **91**

Type: **not specified**

The pion-photon transition form factor at two loops

Thursday, May 20, 2021 8:00 AM (25 minutes)

Presenter: HUBER, Tobias (University of Siegen)

Session Classification: Thursday Parallel I.B

Contribution ID: 92

Type: **not specified**

Third order corrections to the semi-leptonic $b \rightarrow c$ and the muon decays

Thursday, May 20, 2021 8:30 AM (25 minutes)

Presenter: SCHÖNWALD, Kay (Karlsruhe Institute of Technology (KIT))

Session Classification: Thursday Parallel I.B

Contribution ID: 93

Type: **not specified**

NNLO QCD corrections to the B-meson mixing

Thursday, May 20, 2021 9:00 AM (25 minutes)

Presenter: SHTABOVENKO, Vladyslav (KIT)

Session Classification: Thursday Parallel I.B

Contribution ID: 94

Type: **not specified**

Radiative corrections in neutrino physics

Thursday, May 20, 2021 9:30 AM (25 minutes)

Presenter: Dr TOMALAK, Oleksandr (University of Kentucky)

Session Classification: Thursday Parallel I.B

Contribution ID: 95

Type: **not specified**

Higher-order beta functions in the Standard Model and beyond

Presenter: HERREN, Florian (Fermilab)

Session Classification: Thursday Parallel II.A

Contribution ID: 96

Type: **not specified**

Complete analytic four-loop cusp and collinear anomalous dimensions

Presenter: SCHABINGER, Robert

Session Classification: Thursday Parallel II.A

Contribution ID: 97

Type: **not specified**

The full angle-dependence of the four-loop cusp anomalous dimension in QED

Presenter: DLAPA, Christoph (Max Planck Institute for Physics)

Session Classification: Thursday Parallel II.A

Contribution ID: 98

Type: **not specified**

Three-loop soft anomalous dimensions in QCD

Presenter: KIDONAKIS, Nikolaos (Kennesaw State University)

Session Classification: Thursday Parallel II.A

Contribution ID: 99

Type: **not specified**

Importing perturbative QCD methods into gravitational wave physics

Presenter: ZENG, Mao (ETH Zürich)

Session Classification: Thursday Parallel II.B

Contribution ID: **100**

Type: **not specified**

Feynman integrals for binary systems of black holes

Presenter: WEINZIERL, Stefan (Universität Mainz)

Session Classification: Thursday Parallel II.B

Contribution ID: **101**

Type: **not specified**

The gravitational potential at fifth order

Presenter: Dr MAIER, Andreas (DESY)

Session Classification: Thursday Parallel II.B

Contribution ID: **102**

Type: **not specified**

Mixed QCD-EW corrections to pp to e nue + X at the LHC

Thursday, May 20, 2021 2:30 PM (25 minutes)

Presenter: BUONOCORE, Luca (University of Zurich)

Session Classification: Thursday Parallel III.A

Contribution ID: **103**

Type: **not specified**

Automation of Beam and Jet functions at NNLO

Thursday, May 20, 2021 3:00 PM (25 minutes)

Presenter: Dr DAS, Goutam (University of Siegen)

Session Classification: Thursday Parallel III.A

Contribution ID: **104**

Type: **not specified**

The 2-Loop radiative Gluon Jet Function

Thursday, May 20, 2021 3:30 PM (25 minutes)

Presenter: SCHNUBEL, Marvin (Johannes Gutenberg-University Mainz)

Session Classification: Thursday Parallel III.A

Contribution ID: 105

Type: **not specified**

Subleading power resummation and the divergent endpoint contribution in DIS

Thursday, May 20, 2021 4:00 PM (25 minutes)

Presenter: SZAFRON, Robert (Brookhaven National Laboratory)

Session Classification: Thursday Parallel III.A

Contribution ID: **106**

Type: **not specified**

The dimension-shift conjecture

Thursday, May 20, 2021 2:30 PM (25 minutes)

Presenter: JEHU, Guy (Trinity College Dublin)

Session Classification: Thursday Parallel III.B

Contribution ID: **107**

Type: **not specified**

Applications of the Perturbative Gradient Flow

Thursday, May 20, 2021 3:00 PM (25 minutes)

Presenter: LANGE, Fabian (KIT)

Session Classification: Thursday Parallel III.B

Contribution ID: **108**

Type: **not specified**

A new Wilson line-based classical action for gluodynamics

Thursday, May 20, 2021 3:30 PM (25 minutes)

Presenter: KOTKO, Piotr (AGH UST)

Session Classification: Thursday Parallel III.B

Contribution ID: 109

Type: **not specified**

The PMC_{∞} : Infinite-Order Scale-Setting method using the Principle of Maximum Conformality and preserving the Intrinsic Conformality (iCF)

Thursday, May 20, 2021 4:00 PM (25 minutes)

Presenter: DI GIUSTINO, Leonardo (Insubria University)

Session Classification: Thursday Parallel III.B

Contribution ID: **110**

Type: **not specified**

Nested soft-collinear subtractions for deep inelastic scattering

Thursday, May 20, 2021 10:30 AM (25 minutes)

Presenter: ASTERIADIS, Konstantin (Brookhaven National Laboratory)

Session Classification: Thursday Parallel II.A

Contribution ID: 111

Type: **not specified**

Importing perturbative QCD methods into gravitational wave physics

Thursday, May 20, 2021 11:00 AM (25 minutes)

Presenter: ZENG, Mao (ETH Zürich)

Session Classification: Thursday Parallel II.A

Contribution ID: 112

Type: **not specified**

Feynman integrals for binary systems of black holes

Thursday, May 20, 2021 11:30 AM (25 minutes)

Presenter: WEINZIERL, Stefan (Universität Mainz)

Session Classification: Thursday Parallel II.A

Contribution ID: 113

Type: **not specified**

The gravitational potential at fifth order

Thursday, May 20, 2021 12:00 PM (25 minutes)

Presenter: MAIER, Andreas (DESY)

Session Classification: Thursday Parallel II.A

Contribution ID: 114

Type: **not specified**

Higher-order beta functions in the Standard Model and beyond

Thursday, May 20, 2021 10:30 AM (25 minutes)

Presenter: HERREN, Florian (Fermilab)

Session Classification: Thursday Parallel II.B

Contribution ID: 115

Type: **not specified**

Complete analytic four-loop cusp and collinear anomalous dimensions

Thursday, May 20, 2021 11:00 AM (25 minutes)

Presenter: SCHABINGER, Robert

Session Classification: Thursday Parallel II.B

Contribution ID: 116

Type: **not specified**

The full angle-dependence of the four-loop cusp anomalous dimension in QED

Thursday, May 20, 2021 11:30 AM (25 minutes)

Presenter: DLAPA, Christoph (Max Planck Institute for Physics)

Session Classification: Thursday Parallel II.B

Contribution ID: 117

Type: **not specified**

Three-loop soft anomalous dimensions in QCD

Thursday, May 20, 2021 12:00 PM (25 minutes)

Presenter: KIDONAKIS, Nikolaos (Kennesaw State University)

Session Classification: Thursday Parallel II.B