

N³LO kick-off workstop / thinkstart

Report of Contributions

Contribution ID: 1

Type: **not specified**

Seminar: Three loop corrections for the QCD and QED form factors

Wednesday, August 3, 2022 2:00 PM (1 hour)

- the details our calculation of hep-ph/2202.05276, in particular the semi-analytic method employed for the MIs and the optimization of the MI basis.
- discuss the possible implementation in a C++/Fortran code, what is necessary for the Monte Carlo and which features you require.
- discuss which contributions with closed fermion loops and hadronic vacuum polarization would be necessary to calculate.

Presenters: LANGE, Fabian (KIT); SCHOENWALD, Kai (KIT); FAEL, Matteo (KIT Karlsruhe)

Session Classification: VVV

Contribution ID: 2

Type: **not specified**

Seminar: Two-Loop amplitudes via the AIDA framework

Thursday, August 4, 2022 9:00 AM (30 minutes)

Primary author: RONCA, Jonathan (INFN - Sezione Napoli)

Presenter: RONCA, Jonathan (INFN - Sezione Napoli)

Session Classification: RVV

Contribution ID: 3

Type: **not specified**

Seminar: OpenLoops (current and upcoming IR stability developments at one-loop)

Thursday, August 4, 2022 2:00 PM (1 hour)

Presenters: LINDERT, Jonas (IPPP); SCHÄR, Natalie; LINDERT, Jonas (University of Sussex)

Session Classification: RRV

Contribution ID: 4

Type: **not specified**

Seminar: McMule Approach to/at N³LO (Pt. 1)

Friday, August 5, 2022 9:00 AM (30 minutes)

Presenter: ROCCO, Marco (PSI)

Session Classification: assembly & dirty tricks

Contribution ID: 5

Type: **not specified**

Welcome

Wednesday, August 3, 2022 10:00 AM (30 minutes)

Presenter: ULRICH, Yannick (University of Durham)

Contribution ID: 6

Type: **not specified**

Seminar: OpenLoops (status at two-loop)

Presenter: SCHÄR, Natalie

Session Classification: RRV

Contribution ID: 7

Type: **not specified**

Seminar: analytic two loop amplitudes from finite fields

Thursday, August 4, 2022 9:30 AM (30 minutes)

Presenters: MOODIE, Ryan (Turin University); MOODIE, Ryan (University of Turin)

Session Classification: RVV

Contribution ID: 8

Type: **not specified**

Seminar: McMule Approach to/at N³LO (Pt. 2)

Friday, August 5, 2022 9:30 AM (30 minutes)

Presenter: ENGEL, Tim (Paul Scherrer Institute & University of Zurich)

Session Classification: assembly & dirty tricks

Contribution ID: 9

Type: **not specified**

Motivations and goal

Wednesday, August 3, 2022 10:30 AM (30 minutes)

Presenter: ULRICH, Yannick (University of Durham)

Session Classification: Open Discussion

Contribution ID: **10**

Type: **not specified**

Summary & Homework

Friday, August 5, 2022 1:30 PM (1 hour)

Presenter: SIGNER, Adrian

Session Classification: Open Discussion

Contribution ID: 11

Type: **not specified**

Conference Dinner

Thursday, August 4, 2022 6:30 PM (3h 30m)