

Session Program

7-17 Jun 2022

Precision calculations for future e+e- colliders: targets and tools

***Talks and discussions: multi-loop
computational techniques***

CERN, 4/3-006 - TH Conference Room

Monday 13 June

13:00

Talks and discussions: multi-loop computational techniques

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:00–13:40 **Latest IBP reduction techniques**

Speaker

Tiziano Peraro

Location

CERN, 4/3-006 - TH Conference Room

14:00–14:40 **Modern calculation techniques for multi-scale loop amplitudes**

Speaker

Vasily Sotnikov

Location

CERN, 4/3-006 - TH Conference Room

15:00–15:30 **Coffee break**

15:30–16:10 **OpenLoops @ 2 loops**

Speaker

Max Zoller

Location

CERN, 4/3-006 - TH Conference Room

17:00

Tuesday 14 June

13:00

Talks and discussions: multi-loop computational techniques

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:00–13:40 **Local unitarity: perspectives for future lepton colliders**

Speaker

Valentin Hirschi

Location

CERN, 4/3-006 - TH Conference Room

14:00–14:40 **Integrand subtraction & numerical integration**

Speaker

Charalampos Anastasiou

Location

CERN, 4/3-006 - TH Conference Room

15:00–15:30 **Coffee break**

15:30–16:10 **Analytic methods for multi-loop calculations**

Speaker

Andreas von Manteuffel

Location

CERN, 4/3-006 - TH Conference Room

17:00

Wednesday 15 June

13:00

Talks and discussions: multi-loop computational techniques

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:00–13:40

Numerical evaluation of QCD virtual corrections with top quarks in e^+e^- collisions

Speaker

Long Chen

Location

CERN, 4/3-006 - TH Conference Room

14:00–15:00 **TH colloquium**

Location

CERN, 4/3-006 - TH Conference Room

15:00–15:30 **Coffee break**

15:30–16:10 **Elliptic integrals**

Speaker

Stefan Weinzierl

Location

CERN, 4/3-006 - TH Conference Room

17:40

Thursday 16 June

13:00

Talks and discussions: multi-loop computational techniques

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:00–13:40 **Numerical calculations using pySecDec**

Speakers

Vitalii Ivanovych Maheria, Vitalii Maheria

Location

CERN, 4/3-006 - TH Conference Room

14:00–14:40 **Feynman parametrization and numerical integration**

Speakers

Janusz Gluza, Janusz Gluza

Location

CERN, 4/3-006 - TH Conference Room

15:00–15:30 **Coffee break**

15:30–16:10 **Mixed QCD-EW corrections to neutral-current Drell-Yan**

Speaker

Narayan Rana

Location

CERN, 4/3-006 - TH Conference Room

17:00

Friday 17 June

13:00

Talks and discussions: multi-loop computational techniques

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:00–13:40 **DiffExp and Feynman parameter integration**

Speaker

Martijn Hidding

Location

CERN, 4/3-006 - TH Conference Room

14:00–14:30 **Coffee break**

14:30–15:10 **The AMFlow approach**

Speaker

Xiao Liu

Location

CERN, 4/3-006 - TH Conference Room

15:30–15:50 **Workshop wrap up**

Location

CERN, 4/3-006 - TH Conference Room

17:00