Session Program

10–15 Mar 2019

ACAT 2019

Track 3: Computations in Theoretical Physics: Techniques and Methods

Steinmatte conference center
Hotel Allalin, Saas Fee, Switzerland https://allalin.ch/conference/

Monday 11 March

15:30

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

15:30–15:50 **Riemann-Theta Boltzmann Machine**

Speaker
Stefano Carrazza

15:50–16:10

Numerical multi-loop integration on heterogeneous many-core processors

Speaker
Dr Elise de Doncker

16:10–16:30 **Machine Learning helping Monte-Carlo collider simulations**

Speaker
Dr Valentin Hirschi

16:30–16:50

In-situ analysis and visualization of massively parallel computations of transitional and turbulent flows

Speaker
Dr Anne Cadiou

17:30

18:00

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

18:00–18:20 **Toward an efficient evaluation of two-loop massive scalar integralss**

Speaker
Mr Jean-Philippe Guillet

19:30

Tuesday 12 March

15:30

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

15:30–15:50

QED and electroweak radiative corrections to polarized Bhabha scattering

Speaker
Prof. Andrey Arbuzov

15:50–16:10

MCSANCee generator with one-loop electroweak corrections for processes with polarized e^+e^- beams

Speaker
Dr Renat Sadykov

16:10–16:30

Recent developments of GRACE system

Speaker
Yoshimasa Kurihara

16:30–16:50

Data-driven Monte Carlo Generator for Low Energy e+e- Annihilation to Hadrons

Speaker
Mr Alexandr Korobov

17:30

18:00

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

18:20–18:40

Numerical calculation of high-order QED contributions to the electron anomalous magnetic moment

Speaker
Mr Sergey Volkov

19:30

Wednesday 13 March

15:30

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

15:30–15:50

Trilinear Higgs boson coupling variations for di-Higgs production with full NLO QCD predictions in POWHEG

Speaker
Ludovic Michel Scyboz

15:50–16:10

Double Higgs boson production in the high- and low-energy limits

Speaker
Joshua Davies

16:10–16:30

Three loop QCD corrections to heavy quark form factors

Speaker
Dr Narayan Rana

16:30–16:50

Ntuples for NNLO processes

Speaker
Daniel Maitre

16:50–17:10

HepMC3 Event Record Library for Monte Carlo Event Generators

Speaker
Andrii Verbytskyi

17:30

18:00

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

18:00–18:20

Renormalization of gauge theories at five loops

Speaker
York Schröder

18:20–18:40

Algorithm to find an all-order in the running coupling solution to an equation of the DGLAP type

Speaker
Igor Kondrashuk

19:30

Thursday 14 March

15:30

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

16:10–16:30

New Features in FeynArts & Friends, and how they got used in FeynHiggs

Speaker
Thomas Hahn

16:30–16:50

Updates on SModelS

Speaker
Dr Wolfgang Waltenberger

16:50–17:10

Further developments of FORM

Speaker
Takahiro Ueda

17:30

18:00

Track 3: Computations in Theoretical Physics: Techniques and Methods

Session | **Location:** Steinmatte Room C

18:00–18:20

Rings: an efficient library for polynomial rings

Speaker
Stanislav Poslavsky

18:20–18:40

reFORM: designing a new symbolic manipulation toolkit

Speaker
Ben Ruijl

18:40–19:00

STR: a Mathematica package for the method of uniqueness

Speaker
Dr Michelangelo Preti

19:30