

Energy Frontier Workshop - Restart

Report of Contributions

Contribution ID: 1

Type: **not specified**

EF Overview, Schedule and Plans

Monday, 30 August 2021 10:00 (15 minutes)

Presenter: TRICOLI, Alessandro (BNL)

Session Classification: Plenary 1

Contribution ID: 2

Type: **not specified**

EF Highlights

Monday, 30 August 2021 10:15 (20 minutes)

Presenter: REINA, Laura (Florida State University)

Session Classification: Plenary 1

Contribution ID: 3

Type: **not specified**

Monte Carlo Production plans

Monday, 30 August 2021 10:35 (15 minutes)

Presenter: STUPAK, John (University of Oklahoma)

Session Classification: Plenary 1

Contribution ID: 4

Type: **not specified**

Discussion

Monday, 30 August 2021 10:50 (10 minutes)

Session Classification: Plenary 1

Contribution ID: 5

Type: **not specified**

Impact of g-2 and flavor anomalies on EF

Monday, 30 August 2021 13:30 (30 minutes)

Presenter: ALTMANNSHOFER, Wolfgang (UC Santa Cruz)

Session Classification: Plenary 2

Contribution ID: 6

Type: **not specified**

Progress on Instrumentation and its impact on EF - Part I

Monday, 30 August 2021 14:00 (30 minutes)

Presenter: VERNIERI, Caterina (SLAC)

Session Classification: Plenary 2

Contribution ID: 7

Type: **not specified**

Status of activities and progress made in Accelerator Frontier

Tuesday, 31 August 2021 10:00 (30 minutes)

Presenter: RAUBENHEIMER, Tor (SLAC)

Session Classification: Plenary 3

Contribution ID: 8

Type: **not specified**

What EF most needs from theory - Open forum

Tuesday, 31 August 2021 10:30 (30 minutes)

Presenter: REINA, Laura (Florida State University)

Session Classification: Plenary 3

Contribution ID: 9

Type: **not specified**

Muon collider and other emerging ideas

Tuesday, 31 August 2021 11:00 (30 minutes)

Presenters: DASU, Sridhara (University of Wisconsin); DASU, Sridhara

Session Classification: Plenary 4

Contribution ID: **10**

Type: **not specified**

Technologies and R&D directions for trackers and calorimeters

Tuesday, 31 August 2021 11:30 (30 minutes)

Presenter: APRESYAN, Artur (Fermilab)

Session Classification: Plenary 4

Contribution ID: 11

Type: **not specified**

EF01 highlights and plans

Friday, 3 September 2021 10:00 (20 minutes)

Presenter: VERNIERI, Caterina (SLAC)

Session Classification: Plenary 5

Contribution ID: 12

Type: **not specified**

EF02 highlights and plans

Friday, 3 September 2021 10:20 (20 minutes)

Presenter: OJALVO, Isobel (Princeton University (US))

Session Classification: Plenary 5

Contribution ID: 13

Type: **not specified**

EF03 highlights and plans

Friday, 3 September 2021 10:40 (20 minutes)

Presenter: WACKEROTH, Doreen (University at Buffalo, SUNY)

Session Classification: Plenary 5

Contribution ID: 14

Type: **not specified**

EF04 highlights and plans

Friday, 3 September 2021 11:00 (20 minutes)

Presenter: FREITAS, Ayres (University of Pittsburgh)

Session Classification: Plenary 6

Contribution ID: 15

Type: **not specified**

EF05 highlights and plans

Friday, 3 September 2021 11:20 (20 minutes)

Presenter: HOECHE, Stefan (Fermilab)

Session Classification: Plenary 6

Contribution ID: 16

Type: **not specified**

EF06 highlights and plans

Friday, 3 September 2021 11:40 (20 minutes)

Presenter: NADOLSKY, Pavel (Southern Methodist University)

Session Classification: Plenary 6

Contribution ID: 17

Type: **not specified**

EF07 highlights and plans

Friday, 3 September 2021 13:00 (20 minutes)

Presenters: LEE, Yen-Jie (Massachusetts Institute of Technology); LEE, Yen-Jie (CERN)

Session Classification: Plenary 7

Contribution ID: **18**

Type: **not specified**

EF08 highlights and plans

Friday, 3 September 2021 13:20 (20 minutes)

Presenter: LIPELES, Elliot (University of Pennsylvania)

Session Classification: Plenary 7

Contribution ID: 19

Type: **not specified**

EF09 highlights and plans

Friday, 3 September 2021 13:40 (20 minutes)

Presenter: PAGAN GRISO, Simone (Lawrence Berkeley National Laboratory)

Session Classification: Plenary 7

Contribution ID: 20

Type: **not specified**

EF10 highlights and plans

Friday, 3 September 2021 14:00 (20 minutes)

Presenter: DOGLIONI, Caterina (Lund University)

Session Classification: Plenary 7

Contribution ID: 21

Type: **not specified**

Discussion

Friday, 3 September 2021 14:20 (10 minutes)

Session Classification: Plenary 7

Contribution ID: 22

Type: **not specified**

EF landscape and perspective to computational needs for future colliders

Tuesday, 31 August 2021 13:00 (20 minutes)

Presenter: ONYISI, Peter (University of Texas at Austin)

Session Classification: Parallel Session B

Contribution ID: 23

Type: **not specified**

Status of activities in CompF and questions for EF community

Tuesday, 31 August 2021 13:20 (20 minutes)

Presenter: ELVIRA, Daniel (Fermilab)

Session Classification: Parallel Session B

Contribution ID: 24

Type: **not specified**

Discussion

Tuesday, 31 August 2021 13:40 (50 minutes)

Session Classification: Parallel Session B

Contribution ID: 25

Type: **not specified**

ILC Discussion

Wednesday, 1 September 2021 15:00 (10 minutes)

Presenter: LIST, Benno (DESY)

Session Classification: Unstructured Discussions

Contribution ID: 26

Type: **not specified**

CLIC Discussion

Wednesday, 1 September 2021 15:10 (10 minutes)

Presenter: STAPNES, Steinar (FNAL)

Session Classification: Unstructured Discussions

Contribution ID: 27

Type: **not specified**

FCCee/hh/CEPC/SPPC Discussion

Wednesday, 1 September 2021 15:20 (10 minutes)

Presenter: ZIMMERMANN, Frank (CERN)

Session Classification: Unstructured Discussions

Contribution ID: 28

Type: **not specified**

FNAL site fillers option Discussion

Wednesday, 1 September 2021 15:30 (10 minutes)

Presenter: BHAT, Pushpalatha (Fermilab)

Session Classification: Unstructured Discussions

Contribution ID: 29

Type: **not specified**

General Discussion

Wednesday, 1 September 2021 15:40 (50 minutes)

Session Classification: Unstructured Discussions

Contribution ID: **30**

Type: **not specified**

Discussion on Advanced collider concepts

Thursday, 2 September 2021 15:00 (10 minutes)

Presenter: Dr GEDDES, Cameron (LBNL)

Session Classification: Unstructured Discussions

Contribution ID: **31**

Type: **not specified**

Discussion on Physics drivers and the colliders

Thursday, 2 September 2021 15:10 (10 minutes)

Presenter: WANG, Liantao (University of Chicago)

Session Classification: Unstructured Discussions

Contribution ID: 32

Type: **not specified**

Progress of the AF Implementation Task Force

Thursday, 2 September 2021 15:20 (20 minutes)

Presenter: ROSER, Thomas (BNL)

Session Classification: Unstructured Discussions

Contribution ID: 33

Type: **not specified**

General Discussion

Thursday, 2 September 2021 15:40 (50 minutes)

Session Classification: Unstructured Discussions

Contribution ID: 34

Type: **not specified**

Status of Higgs CP Studies

Wednesday, 1 September 2021 10:00 (15 minutes)

Presenter: GRITSAN, Andrei (Johns Hopkins University)

Session Classification: Parallel Session C

Contribution ID: 35

Type: **not specified**

Discussion

Wednesday, 1 September 2021 10:15 (7 minutes)

Session Classification: Parallel Session C

Contribution ID: 36

Type: **not specified**

Light Quark Yukawas

Wednesday, 1 September 2021 10:22 (15 minutes)

Presenter: GROJEAN, Christophe (DESY and Humboldt University)

Session Classification: Parallel Session C

Contribution ID: 37

Type: **not specified**

Discussion

Wednesday, 1 September 2021 10:37 (7 minutes)

Session Classification: Parallel Session C

Contribution ID: **38**

Type: **not specified**

Update on Higgs Studies at a Muon Collider

Wednesday, 1 September 2021 10:44 (16 minutes)

Presenter: LIU, Zhen (University of Minnesota)

Session Classification: Parallel Session C

Contribution ID: **39**

Type: **not specified**

Discussion

Wednesday, 1 September 2021 11:00 (7 minutes)

Session Classification: Parallel Session D

Contribution ID: 40

Type: **not specified**

Update on HH Production

Wednesday, 1 September 2021 11:07 (15 minutes)

Presenter: GANGULY, Sanmay (Weizmann Institute Of Science)

Session Classification: Parallel Session D

Contribution ID: 41

Type: **not specified**

Discussion

Wednesday, 1 September 2021 11:22 (7 minutes)

Session Classification: Parallel Session D

Contribution ID: 42

Type: **not specified**

C3 Proposal

Wednesday, 1 September 2021 11:29 (15 minutes)

Presenter: NANNI, Emilio (SLAC)

Session Classification: Parallel Session D

Contribution ID: 43

Type: **not specified**

Discussion

Wednesday, 1 September 2021 11:44 (16 minutes)

Session Classification: Parallel Session D

Contribution ID: 44

Type: **not specified**

LEP jet studies and its implications to future EIC measurements

Thursday, 2 September 2021 11:30 (6 minutes)

Presenter: CHEN, Yi (MIT)

Session Classification: Parallel Session G

Contribution ID: 45

Type: **not specified**

Workshop Summary: Heavy Ion and New Physics

Thursday, 2 September 2021 11:02 (14 minutes)

Presenter: HAJER, Jan (Université catholique de Louvain)

Session Classification: Parallel Session G

Contribution ID: 46

Type: **not specified**

Workshop Summary: Opportunities of OO and pO collisions at the LHC

Thursday, 2 September 2021 11:16 (14 minutes)

Presenter: VAN DER SCHEE, Wilke (CERN)

Session Classification: Parallel Session G

Contribution ID: 47

Type: **not specified**

Heavy Flavor @ EIC

Thursday, 2 September 2021 11:36 (8 minutes)

Presenters: VITEV, Ivan (Los Alamos National Laboratory); SEKULA, Stephen (Southern Methodist University); DONG, Xin (Lawrence Berkeley National Laboratory)

Session Classification: Parallel Session G

Contribution ID: 48

Type: **not specified**

Jets @ EIC

Thursday, 2 September 2021 11:44 (8 minutes)

Presenters: Prof. ARRATIA, Miguel (University of California, Riverside & Thomas Jefferson National Laboratory); KANG, Zhongbo (UCLA)

Session Classification: Parallel Session G

Contribution ID: 49

Type: **not specified**

High-dimensional Anomaly Detection with Radiative Return in e^+e^- Collisions

Wednesday, 1 September 2021 11:00 (20 minutes)

Presenter: GONSKI, Julia (Columbia University)

Session Classification: Parallel Session D

Contribution ID: 50

Type: **not specified**

Sensitivity to Dijet Resonances at Proton-Proton Colliders

Wednesday, 1 September 2021 11:20 (20 minutes)

Presenter: HARRIS, Robert (Fermilab)

Session Classification: Parallel Session D

Contribution ID: 51

Type: **not specified**

Searching for Leptoquarks at Future Muon Colliders

Wednesday, 1 September 2021 11:40 (20 minutes)

Presenter: CESAROTTI, Cari (Harvard University)

Session Classification: Parallel Session D

Contribution ID: 52

Type: **not specified**

New angular selection to improve soft opposite-sign dilepton+jets+MET signature from higgsino pair production at hadron colliders

Wednesday, 1 September 2021 13:00 (20 minutes)

Presenters: SENGUPTA, Dibyashree (National Taiwan University); BAER, Howard (University of Oklahoma)

Session Classification: Parallel Session E

Contribution ID: 53

Type: **not specified**

Progress on pMSSM scans for Snowmass

Wednesday, 1 September 2021 13:20 (20 minutes)

Presenter: DICKINSON, Jennet (Fermilab)

Session Classification: Parallel Session E

Contribution ID: 54

Type: **not specified**

EF08 Discussion

Wednesday, 1 September 2021 13:40 (20 minutes)

Presenters: LIPELES, Elliot (University of Pennsylvania); HIRSCHAUER, James (Fermi National Accelerator Laboratory); SHAH, Nausheen (FNAL)

Session Classification: Parallel Session E

Contribution ID: 55

Type: **not specified**

EF09 Discussion

Wednesday, 1 September 2021 14:05 (20 minutes)

Presenters: PAGAN GRISO, Simone (Lawrence Berkeley National Laboratory); BOSE, Tulika (University of Wisconsin-Madison); LIU, Zhen (University of Minnesota)

Session Classification: Parallel Session E

Contribution ID: 56

Type: **not specified**

Heavy Flavor Physics at a Linear Collider

Wednesday, 1 September 2021 13:00 (15 minutes)

Presenter: POESCHL, Roman (LAL Orsay)

Session Classification: Parallel Session E

Contribution ID: 57

Type: **not specified**

Soft gluons in top processes at high energies

Wednesday, 1 September 2021 13:18 (15 minutes)

Presenter: KIDONAKIS, Nikolaos (Kennesaw State University)

Session Classification: Parallel Session E

Contribution ID: 58

Type: **not specified**

New ideas for top quark mass measurements

Wednesday, 1 September 2021 13:36 (15 minutes)

Presenter: AGASHE, Kaustubh (University of Maryland)

Session Classification: Parallel Session E

Contribution ID: 59

Type: **not specified**

Quark spin correlations and constraining new physics

Wednesday, 1 September 2021 14:12 (15 minutes)

Presenter: BAKSHI, Amandeep (Purdue University)

Session Classification: Parallel Session E

Contribution ID: **60**

Type: **not specified**

Opportunities for top quark physics at a muon collider

Wednesday, 1 September 2021 13:54 (15 minutes)

Presenter: THEIL, Tobias (Technical University Munich)

Session Classification: Parallel Session E

Contribution ID: **61**

Type: **not specified**

Gluon saturation @ EIC

Thursday, 2 September 2021 11:52 (8 minutes)

Presenter: SCHENKE, Bjoern (BNL)

Session Classification: Parallel Session G

Contribution ID: **62**

Type: **not specified**

Introduction

Presenter: LEE, Yen-Jie (Massachusetts Institute of Technology)

Session Classification: Parallel Session G

Contribution ID: **63**

Type: **not specified**

EF07 discussion

Session Classification: Parallel Session G

Contribution ID: 64

Type: **not specified**

Theory errors in EFT studies

Thursday, 2 September 2021 10:00 (18 minutes)

Presenter: DURIEUX, Gauthier (Technion)

Session Classification: Parallel Session F

Contribution ID: 65

Type: **not specified**

Global fits @ Snowmass 2021

Thursday, 2 September 2021 10:24 (18 minutes)

Presenter: GU, Jiayin (JGU Mainz)

Session Classification: Parallel Session F

Contribution ID: 66

Type: **not specified**

Progress of the FCC-ee feasibility study and precision measurements

Thursday, 2 September 2021 10:48 (18 minutes)

Presenters: BLONDEL, Alain (DPNC Université de Genève); AZZI, Patrizia (INFN - LPC)

Session Classification: Parallel Session F

Contribution ID: 67

Type: **not specified**

Top-quark EFT studies

Thursday, 2 September 2021 11:12 (18 minutes)

Presenter: CASTRO, Nuno

Session Classification: Parallel Session G

Contribution ID: **68**

Type: **not specified**

Precision studies at a muon collider

Thursday, 2 September 2021 11:36 (18 minutes)

Presenters: MEADE, Patrick (Stony Brook); MEADE, Patrick (Stony Brook University)

Session Classification: Parallel Session G

Contribution ID: 69

Type: **not specified**

Experimental and phenomenological issues relevant for PDF extractions from top differential distributions

Thursday, 2 September 2021 13:00 (18 minutes)

Presenter: COOPER-SARKAR, Amanda (University of Oxford)

Session Classification: Parallel Session H

Contribution ID: 70

Type: **not specified**

The role of top quark observables in PDFs: CT

Thursday, 2 September 2021 13:23 (13 minutes)

Presenter: Dr GUZZI, Marco (Kennesaw State University)

Session Classification: Parallel Session H

Contribution ID: 71

Type: **not specified**

The role of top quark observables in PDFs: MSHT

Thursday, 2 September 2021 13:39 (13 minutes)

Presenter: THORNE, Robert (UCL)

Session Classification: Parallel Session H

Contribution ID: 72

Type: **not specified**

The role of top quark observables in PDFs: NNPDF

Thursday, 2 September 2021 13:55 (13 minutes)

Presenter: Dr NOCERA, Emanuele (The University of Edinburgh)

Session Classification: Parallel Session H

Contribution ID: 73

Type: **not specified**

Simultaneous extraction of α_s and m_t from LHC $t\bar{t}$ differential distributions

Thursday, 2 September 2021 14:11 (15 minutes)

Presenter: LIM, Matthew (University of Cambridge)

Session Classification: Parallel Session H

Contribution ID: 74

Type: **not specified**

Introduction

Thursday, 2 September 2021 13:00 (10 minutes)

Presenters: DOGLIONI, Caterina (Lund University); WANG, Liantao (University of Chicago)

Session Classification: Parallel Session H

Contribution ID: 75

Type: **not specified**

Dark showers Snowmass project activities

Thursday, 2 September 2021 13:10 (20 minutes)

Presenters: GENEST, Marie-Hélène (LPSC-Grenoble, CNRS/UGA (FR)); KULKARNI, Suchita; KULKARNI, Suchita; KULKARNI, Suchita

Session Classification: Parallel Session H

Contribution ID: 76

Type: **not specified**

DM simplified models scan with lower couplings

Thursday, 2 September 2021 13:30 (20 minutes)

Plans for Dark Matter WG whitepaper after Snowmass restart

Presenters: ALBERT, Andreas (Boston University (US)); PACHAL, Katherine (Duke University (US))

Session Classification: Parallel Session H

Contribution ID: 77

Type: **not specified**

Open discussion: Global EFT fits for future e+e-

Monday, 30 August 2021 11:00 (30 minutes)

Presenter: PESKIN, Michael (SLAC)

Session Classification: Parallel Session A

Contribution ID: 78

Type: **not specified**

Open discussion: Global EFT fits for LHC

Monday, 30 August 2021 11:30 (30 minutes)

Presenter: GROJEAN, Christophe (DESY and Humboldt University)

Session Classification: Parallel Session A

Contribution ID: 79

Type: **not specified**

Open discussion: Global EFT fits for top-quark operators

Monday, 30 August 2021 12:00 (30 minutes)

Presenter: VYRONIDOU, Eleni (University of Manchester)

Session Classification: Parallel Session A

Contribution ID: **80**

Type: **not specified**

Plans on benchmark models from RF6

Tuesday, 31 August 2021 13:00 (20 minutes)

Presenter: WILLIAMS, Mike (MIT)

Session Classification: Parallel Session B

Contribution ID: **81**

Type: **not specified**

Discussion about Higgs to invisible (Higgs portal) benchmarks

Tuesday, 31 August 2021 13:20 (20 minutes)

Presenters: DOGLIONI, Caterina (Lund University); WANG, Liantao (University of Chicago); ROBENS, Tania (IKTP, TU Dresden)

Session Classification: Parallel Session B

Contribution ID: **82**

Type: **not specified**

Cuts for two-body decays at colliders

Wednesday, 1 September 2021 10:00 (20 minutes)

Primary author: Prof. SALAM, Gavin (University of Oxford)

Presenter: Prof. SALAM, Gavin (University of Oxford)

Session Classification: Parallel Session C

Contribution ID: **83**

Type: **not specified**

Machine Learning Overview

Wednesday, 1 September 2021 10:20 (20 minutes)

Primary author: NACHMAN, Benjamin (LBNL)

Presenter: NACHMAN, Benjamin (LBNL)

Session Classification: Parallel Session C

Contribution ID: **84**

Type: **not specified**

Updates on PDF4LHC

Wednesday, 1 September 2021 10:40 (20 minutes)

Primary author: CRIDGE, Thomas (Univeristy College London)

Presenter: CRIDGE, Thomas (Univeristy College London)

Session Classification: Parallel Session C

Contribution ID: **85**

Type: **not specified**

Workshop Summary: LesHouches

Thursday, 2 September 2021 10:00 (20 minutes)

Primary author: HUSTON, Joey (Michigan State University)

Presenter: HUSTON, Joey (Michigan State University)

Session Classification: Parallel Session F

Contribution ID: **86**

Type: **not specified**

Workshop Summary: Boost

Thursday, 2 September 2021 10:30 (20 minutes)

Primary author: LEBLANC, Matt (CERN)

Presenter: LEBLANC, Matt (CERN)

Session Classification: Parallel Session F

Contribution ID: 87

Type: **not specified**

Workshop Summary: Event Generators (TBC)

Session Classification: Parallel Session F

Contribution ID: **88**

Type: **not specified**

WIMP at muon colliders

Thursday, 2 September 2021 13:50 (20 minutes)

Presenter: COSTA, Marco

Session Classification: Parallel Session H

Contribution ID: **89**

Type: **not specified**

Disappearing tracks at muon collider

Thursday, 2 September 2021 14:10 (20 minutes)

Presenter: ZURITA, Jose Francisco (IFIC)

Session Classification: Parallel Session H

Contribution ID: **90**

Type: **not specified**

Discussion

Thursday, 2 September 2021 10:20 (10 minutes)

Session Classification: Parallel Session F

Contribution ID: **91**

Type: **not specified**

Discussion

Thursday, 2 September 2021 10:50 (10 minutes)

Session Classification: Parallel Session F