

Snowmass Day

Report of Contributions

Contribution ID: 1

Type: **not specified**

Plenary Session

Accelerator Frontier 10' each
Community Engagement Frontier
Computational Frontier
Cosmic Frontier
Energy Frontier
Instrumentation Frontier
Neutrino Frontier
Rare Processes and Precision Frontier
Underground Facilities Frontier
Theory Frontier
Snowmass Early Career
Snowmass Steering Group

Contribution ID: 2

Type: **not specified**

Frontier breakout sessions

Contribution ID: 3

Type: **not specified**

AF

Friday, 24 September 2021 11:00 (10 minutes)

Vladimir Shiltsev

Presenter: SHILTSEV, Vladimir (FNAL)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 4

Type: **not specified**

ComEF

Friday, 24 September 2021 11:10 (10 minutes)

Primary author: ASSAMAGAN, Ketevi Adikle (Brookhaven National Laboratory)

Presenter: ASSAMAGAN, Ketevi Adikle (Brookhaven National Laboratory)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 5

Type: **not specified**

CompF

Friday, 24 September 2021 11:20 (10 minutes)

Benjamin Nachman

Presenter: NACHMAN, Benjamin (LBNL)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 6

Type: **not specified**

CosmF

Friday, 24 September 2021 11:30 (10 minutes)

Aaron Chou

Presenter: CHOU, Aaron (Fermilab)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 7

Type: **not specified**

EF

Friday, 24 September 2021 11:40 (10 minutes)

Alessandro Tricoli

Presenter: TRICOLI, Alessandro (BNL)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 8

Type: **not specified**

IF

Friday, 24 September 2021 11:50 (10 minutes)

Petra Merkel

Presenter: MERKEL, Petra (Fermi National Accelerator Laboratory)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 9

Type: **not specified**

NF

Friday, 24 September 2021 12:00 (10 minutes)

Patrick Huber

Presenter: HUBER, Patrick (Virginia Tech)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: **10**

Type: **not specified**

RPF

Friday, 24 September 2021 12:10 (10 minutes)

Presenter: BERNSTEIN, Robert (Fermilab)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 11

Type: **not specified**

TF

Friday, 24 September 2021 12:20 (10 minutes)

Aida X. El-Kahadra

Presenter: EL-KHADRA, Aida (University of Illinois at Urbana-Champaign)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 12

Type: **not specified**

UF

Friday, 24 September 2021 12:30 (10 minutes)

Jeter Hall

Presenters: HALL, Jeter (SNOLAB); ORRELL, John (Pacific Northwest National Laboratory)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 13

Type: **not specified**

SEC

Friday, 24 September 2021 12:40 (10 minutes)

Julia Gonski

Presenter: GONSKI, Julia (Columbia University)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 14

Type: **not specified**

Steering Group

Friday, 24 September 2021 12:50 (10 minutes)

Tao Han

Presenter: HAN, Tao (University of Pittsburgh)

Session Classification: Plenary Session: Chairs: Young-Kee Kim, Joel Butler. Q&A Moderator: Sekhar Chivukula

Contribution ID: 15

Type: **not specified**

Intro - Snowmass Early Career (SEC) perspective to the Energy Frontier

Friday, 24 September 2021 13:30 (3 minutes)

<!-- zoom link: <https://cern.zoom.us/j/62931574573?pwd=WmEwR2luWmpOaG9oRko4Y213Q21JZz09> -->
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Presenters: TRICOLI, Alessandro (BNL); REINA, Laura (Florida State University); NARAIN, Meenakshi (Brown University)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 16

Type: **not specified**

EF01 Highlights - SEC perspective

Friday, 24 September 2021 13:33 (15 minutes)

Presenter: GANGULY, Sanmay (ICEPP, University of Tokyo)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 17

Type: **not specified**

EF02 Highlights - SEC perspective

Friday, 24 September 2021 13:48 (15 minutes)

Presenter: HOMILLER, Samuel (Harvard)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 18

Type: **not specified**

EF03 Highlights - SEC perspective

Friday, 24 September 2021 14:03 (15 minutes)

Presenter: KRAUS, Manfred (Florida State University)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 19

Type: **not specified**

EF04 Highlights - SEC perspective

Friday, 24 September 2021 14:18 (15 minutes)

Presenters: BHATTACHARYA, Saptaparna (Northwestern University); BHATTACHARYA, Saptaparna (Northwestern University)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 20

Type: **not specified**

EF05 Highlights - SEC perspective

Friday, 24 September 2021 14:33 (15 minutes)

Presenter: ROLOFF, Jennifer (Brookhaven National Laboratory (US))

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 21

Type: **not specified**

EF06 Highlights - SEC perspective

Friday, 24 September 2021 14:48 (15 minutes)

Presenters: GARZELLI, Maria Vittoria (Hamburg Universitaet); GARZELLI, Maria Vittoria (Milan)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 22

Type: **not specified**

EF07 Highlights - SEC perspective

Friday, 24 September 2021 15:03 (15 minutes)

Presenter: CHAPON, Émilien (IHEP / CAS)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 23

Type: **not specified**

EF08 Highlights - SEC perspective

Friday, 24 September 2021 15:18 (15 minutes)

Presenter: DICKINSON, Jennet (Fermilab)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 24

Type: **not specified**

EF09 Highlights - SEC perspective

Friday, 24 September 2021 15:33 (15 minutes)

Presenter: CITRON, Matthew (Univ. of California Santa Barbara (US))

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 25

Type: **not specified**

EF10 Highlights - SEC perspective

Friday, 24 September 2021 15:48 (15 minutes)

Presenter: GAO, Boyu (Duke)

Session Classification: Energy Frontier session - The Snowmass Early Career (SEC) perspective

Contribution ID: 26

Type: **not specified**

Neutrino Physics News

Friday, 24 September 2021 13:30 (30 minutes)

Presenter: HUBER, Patrick (Virginia Tech)

Session Classification: NF

Contribution ID: 27

Type: **not specified**

SEC News

Friday, 24 September 2021 14:00 (5 minutes)

Presenter: ZETTLEMOYER, Jacob (Fermilab)

Session Classification: NF

Contribution ID: 28

Type: **not specified**

Discussion

Friday, 24 September 2021 14:05 (10 minutes)

Session Classification: NF

Contribution ID: 29

Type: **not specified**

Computing Discussion

Friday, 24 September 2021 14:15 (15 minutes)

Presenters: HIMMEL, Alex (Fermilab); SCHELLMAN, Heidi (Oregon state); KIRBY, Michael (FNAL); GOTTLIEB, Steven (Indiana Univ.)

Session Classification: NF

Contribution ID: 30

Type: **not specified**

Panel Discussion: Neutrinos Beyond HEP

Friday, 24 September 2021 14:30 (1h 30m)

Will include brief presentations by panelists: IUPAP panel, NLDBD, gravitational waves, NuTools, Astro2020, and interactive discussion.

Presenters: KLEIN, Joshua (University of Pennsylvania); SCHOLBERG, Kate (Duke University); CADO-NATI, Laura (Georgia Tech); Prof. LINDNER, Manfred (Max-Planck-Institut fuer Kernphysik (MPIK)); KAMIONKOWSKI, Marc (Johns Hopkins); CARR, Rachel (MIT)

Session Classification: NF

Contribution ID: 31

Type: **not specified**

IF01 Status and Plan

Friday, 24 September 2021 13:30 (10 minutes)

Presenter: PYLE, matt (University of California Berkeley)

Session Classification: IF

Contribution ID: 32

Type: **not specified**

IF02 Status and Plan

Friday, 24 September 2021 13:40 (10 minutes)

Presenters: ROGAN, Christopher; ESTRADA VIGIL, Juan (FNAL)

Session Classification: IF

Contribution ID: 33

Type: **not specified**

IF03 Status and Plan

Friday, 24 September 2021 13:50 (10 minutes)

Presenter: AFFOLDER, Tony (UCSC- SCIPP)

Session Classification: IF

Contribution ID: 34

Type: **not specified**

IF04 Status and Plan

Friday, 24 September 2021 14:00 (10 minutes)

Presenter: KETCHUM, Wesley (Fermi National Accelerator Laboratory)

Session Classification: IF

Contribution ID: 35

Type: **not specified**

IF05 Status and Plan

Friday, 24 September 2021 14:10 (10 minutes)

Presenter: VAHSEN, Sven (University of Hawaii)

Session Classification: IF

Contribution ID: 36

Type: **not specified**

IF06 Status and Plan

Friday, 24 September 2021 14:20 (10 minutes)

Presenter: WHITE, Andy (U. texas at Arlington)

Session Classification: IF

Contribution ID: 37

Type: **not specified**

IF07 Status and Plan

Friday, 24 September 2021 14:50 (10 minutes)

Presenter: NEWCOMER, Mitch (U.Penn)

Session Classification: IF

Contribution ID: **38**

Type: **not specified**

IF08 Status and Plan

Friday, 24 September 2021 15:00 (10 minutes)

Presenter: RAAF, Jennifer (Fermilab)

Session Classification: IF

Contribution ID: 39

Type: **not specified**

IF09 Status and Plan

Friday, 24 September 2021 15:10 (10 minutes)

Presenters: GARCIA-SCIVERES, Maurice (LBNL); GARCIA-SCIVERES, Mauricio

Session Classification: IF

Contribution ID: 40

Type: **not specified**

IF10 Status and Plan (TBC)

Friday, 24 September 2021 15:20 (10 minutes)

Session Classification: IF

Contribution ID: 41

Type: **not specified**

EF Liaison

Friday, 24 September 2021 14:30 (10 minutes)

Presenter: VERNIERI, Caterina (SLAC)

Session Classification: IF

Contribution ID: 42

Type: **not specified**

RF Liaison

Friday, 24 September 2021 14:40 (10 minutes)

Presenter: ARTUSO, Marina (syracuse university)

Session Classification: IF

Contribution ID: 43

Type: **not specified**

CommF Liaison

Friday, 24 September 2021 15:30 (10 minutes)

Presenter: Dr FAHIM, Farah (FERMILAB)

Session Classification: IF

Contribution ID: 44

Type: **not specified**

CF2. Dark Matter: Wave-like

Friday, 24 September 2021 13:30 (20 minutes)

Presenters: RYBKA, Gray (University of Washington); Prof. WINSLOW, Lindley (MIT)

Session Classification: CosmF

Contribution ID: 45

Type: **not specified**

CF3. Dark Matter: Cosmic Probes

Friday, 24 September 2021 13:50 (20 minutes)

Presenters: DRLICA-WAGNER, Alex (Fermilab); YU, HAI-BO (UNIVERSITY OF CALIFORNIA, RIVERSIDE)

Session Classification: CosmF

Contribution ID: 46

Type: **not specified**

CF4. Dark Energy and Cosmic Acceleration: the Modern Universe

Friday, 24 September 2021 14:10 (20 minutes)

Presenters: SLOSAR, Anze (BNL); ANNIS, James (Fermilab); NEWMAN, Jeffrey (University of Pittsburgh and PITT-PACC)

Session Classification: CosmF

Contribution ID: 47

Type: **not specified**

CF7. Cosmic Probes of Fundamental Physics

Friday, 24 September 2021 14:30 (20 minutes)

Presenter: BANGALORE, Sathya

Session Classification: CosmF

Contribution ID: 48

Type: **not specified**

CF1. Dark Matter: Particle-like

Friday, 24 September 2021 14:50 (20 minutes)

Presenters: LIPPINCOTT, Hugh (UCSB); COOLEY, Jodi (SMU); LIN, Tongyan (UCSD); SLATYER, Tracy (Massachusetts Institute of Technology)

Session Classification: CosmF

Contribution ID: 49

Type: **not specified**

CF5. Dark Energy and Cosmic Acceleration: Cosmic Dawn and Before

Friday, 24 September 2021 15:10 (20 minutes)

Presenters: CHANG, Clarence (Argonne National Lab); SHOEMAKER, Deirdre

Session Classification: CosmF

Contribution ID: 50

Type: **not specified**

CF6. Dark Energy and Cosmic Acceleration: Complementarity of Probes and New Facilities

Friday, 24 September 2021 15:30 (20 minutes)

Presenter: SCHLEGEL, David (Lawrence Berkeley National Lab)

Session Classification: CosmF

Contribution ID: 51

Type: **not specified**

Cosmic - Computing frontier discussion

Friday, 24 September 2021 15:50 (20 minutes)

Presenter: GOTTLIEB, Steven (Indiana Univ.)

Session Classification: CosmF

Contribution ID: 52

Type: **not specified**

Accelerator & CompF

Friday, 24 September 2021 13:30 (15 minutes)

CompF joins the Accelerator Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 53

Type: **not specified**

Community Engagement & CompF

Friday, 24 September 2021 13:45 (15 minutes)

CompF joins Community Engagement Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 54

Type: **not specified**

Rare Processes and Precision & CompF

Friday, 24 September 2021 14:00 (15 minutes)

CompF joins Rare Processes and Precision Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 55

Type: **not specified**

Neutrino & CompF

Friday, 24 September 2021 14:15 (15 minutes)

CompF joins Neutrino Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 56

Type: **not specified**

Theory & CompF

Friday, 24 September 2021 14:30 (15 minutes)

CompF joins Theory Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 57

Type: **not specified**

Instrumentation & CompF

CompF joins Instrumentation Frontier

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 58

Type: **not specified**

Cosmic & CompF

Friday, 24 September 2021 15:50 (15 minutes)

CompF joins Cosmic Frontier. Note that this session starts five minutes after the previous session and my go over.

Session Classification: Computational Frontier: Will not host a separate breakout session. Will join the other frontiers for related discussions.

Contribution ID: 59

Type: **not specified**

Applications & Industry

Friday, 24 September 2021 13:30 (3 minutes)

Presenters: MUROKH, Alex (RadiaBeam Technologies, LLC.); FAHIM, Farah (FERMILAB); Prof. YOSHIMURA, Koji (Okayama University)

Session Classification: Community Engagement Frontier session

Contribution ID: 60

Type: **not specified**

Career pipeline & Development

Friday, 24 September 2021 13:33 (3 minutes)

Presenters: KARADZHINOVA-FERRER, Aneliya (Ruder Boskovic Institute); HOGAN, Julie (Bethel University); MALIK, Sudhir (University of Puerto Rico Mayaguez)

Session Classification: Community Engagement Frontier session

Contribution ID: 61

Type: **not specified**

Diversity & Inclusion

Friday, 24 September 2021 13:36 (3 minutes)

Presenters: BONIFAZI, Carla (Instituto de Física - Universidade Federal do Rio de Janeiro); BONILLA, Johan (University of California Davis (US)); CHEN, Mu-Chun (University of California, Irvine); LIN, Yi-Hsuan "Cindy" (SNOLAB)

Session Classification: Community Engagement Frontier session

Contribution ID: 62

Type: **not specified**

Physics Education

Friday, 24 September 2021 13:39 (3 minutes)

Presenters: Prof. RUCHTI, Randy (University of Notre Dame); Prof. DE JONG, Sijbrand (Radboud University Nijmegen / Nikhef); Prof. MALIK, Sudhir (University of Puerto Rico Mayaguez)

Session Classification: Community Engagement Frontier session

Contribution ID: 63

Type: **not specified**

Public Education & Outreach

Friday, 24 September 2021 13:42 (3 minutes)

Presenters: Prof. MURONGA, Azwinndini (Nelson Mandela University); LINCOLN, Donald (Fermilab); JEPSEN, Kathryn (Symmetry Magazine); DEMERS, Sarah (Yale)

Session Classification: Community Engagement Frontier session

Contribution ID: 64

Type: **not specified**

Public Policy & Government Engagement

Friday, 24 September 2021 13:45 (3 minutes)

Presenters: CHOUDHARY, Brajesh (University of Delhi); SUTER, Louise (FNAL); FINE, Rob

Session Classification: Community Engagement Frontier session

Contribution ID: 65

Type: **not specified**

Environmental & Societal Impacts

Friday, 24 September 2021 13:48 (3 minutes)

Presenters: BLOOM, Ken (University of Nebraska-Lincoln); HEADLEY, Mike (SDSTA - SURF); BOISVERT, Veronique (Royal Holloway, University of London)

Session Classification: Community Engagement Frontier session

Contribution ID: 66

Type: **not specified**

Liaisons

Friday, 24 September 2021 13:51 (5 minutes)

Presenters: LEE, Claire; WHITESON, Daniel (UC Irvine); Dr BRUHWILER, David (RadiaSoft LLC); WALKER, Devin (SLAC); FAHIM, Farah (FERMILAB); VAN TILBORG, Jeroen (LBNL); F. CARNEIRO, Mateus (Brookhaven National Laboratory); Dr KRAVITZ, Scott (Lawrence Berkeley National Lab); GLEYZER, Sergei; DE JONG, Sijbrand (Radboud University Nijmegen / Nikhef); Dr MIDDLETON, Sophie (Caltech)

Session Classification: Community Engagement Frontier session

Contribution ID: 67

Type: **not specified**

Discussion

Friday, 24 September 2021 13:56 (34 minutes)

Session Classification: Community Engagement Frontier session

Contribution ID: **68**

Type: **not specified**

CompF Discussion

Friday, 24 September 2021 13:30 (15 minutes)

Intro and discussion of CompF topics relevant to AF

Presenter: GOURLAY, Steve (LBNL)

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 69

Type: **not specified**

Energy Frontier Liaison Presentation

Friday, 24 September 2021 13:45 (15 minutes)

Presenter: DENISOV, Dmitri

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 70

Type: **not specified**

TF Liaison Presentation

Friday, 24 September 2021 14:00 (15 minutes)

Presenter: WANG, Liantao (University of Chicago)

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 71

Type: **not specified**

RP Liaison Presentation

Friday, 24 September 2021 14:30 (15 minutes)

Presenter: ECHENARD, Bertrand (Caltech)

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 72

Type: **not specified**

CommF Liaison Presentation

Friday, 24 September 2021 15:00 (15 minutes)

Presenter: VAN TILBORG, Jeroen (LBNL)

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 73

Type: **not specified**

Instrumentation Liaison

Friday, 24 September 2021 15:30 (15 minutes)

Presenter: WHITE, Andy (U. texas at Arlington)

Session Classification: Accelerator Frontier: Accelerator Frontier breakout session is dedicated to liaison-led cross frontier discussions.

Contribution ID: 74

Type: **not specified**

RF1: Weak decays of b and c quarks

Friday, 24 September 2021 13:30 (20 minutes)

Presenter: DI CANTO, Angelo (BNL)

Session Classification: RP & PF

Contribution ID: 75

Type: **not specified**

RF2: Weak decays of strange and light quarks

Friday, 24 September 2021 14:10 (20 minutes)

Presenter: PASSEMAR, Emilie (Indiana University/JLab)

Session Classification: RP & PF

Contribution ID: 76

Type: **not specified**

RF3: Fundamental Physics in Small Experiments

Friday, 24 September 2021 14:30 (20 minutes)

Presenter: BLUM, Thomas (University of Connecticut)

Session Classification: RP & PF

Contribution ID: 77

Type: **not specified**

RF4: Baryon and Lepton Number Violating Processes

Friday, 24 September 2021 14:50 (20 minutes)

Presenter: POCAR, Andrea (university of massachusetts, amherst)

Session Classification: RP & PF

Contribution ID: 78

Type: **not specified**

RF5: Charged Lepton Flavor Violation (electrons, muons and taus)

Friday, 24 September 2021 13:50 (20 minutes)

Presenter: ECHENARD, Bertrand (Caltech)

Session Classification: RP & PF

Contribution ID: 79

Type: **not specified**

RF6: Dark Sector Studies at High Intensities

Friday, 24 September 2021 15:10 (20 minutes)

Presenter: WILLIAMS, Mike (MIT)

Session Classification: RP & PF

Contribution ID: **80**

Type: **not specified**

RF7: Hadron Spectroscopy

Friday, 24 September 2021 15:30 (20 minutes)

Presenter: SKWARNICKI, Tomasz (Syracuse University)

Session Classification: RP & PF

Contribution ID: **81**

Type: **not specified**

CompF discussion

Session Classification: RP & PF