

The Future of High Energy Physics: A New Generation, A New Vision

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome & Introduction

Monday, 25 March 2024 09:45 (25 minutes)

Presenters: DI PETRILLO, Karri Folan (University of Chicago); LEE JR, Lawrence (University of Tennessee (US)); Prof. SHAH, Nausheen (Wayne State University); Dr SHAW, Sally (UCSB)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 2

Type: **not specified**

Big Picture Questions in Particle Physics (from Theory to Experiments)

Tuesday, 26 March 2024 08:00 (25 minutes)

Presenter: GORI, stefania (UC Santa Cruz)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 3

Type: **not specified**

Big Picture Questions in Cosmology

Wednesday, 27 March 2024 08:00 (25 minutes)

Presenter: SLATYER, Tracy

Session Classification: Future of Cosmology

Contribution ID: 4

Type: **not specified**

P5 Report

Presenter: Prof. HEEGER, Karsten

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 5

Type: **not specified**

Post-P5 Physics Vision

Monday, 25 March 2024 10:10 (50 minutes)

Presenter: MURAYAMA, Hitoshi (University of California Berkeley (US))

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 6

Type: **not specified**

Direct Detection Overview

Monday, 25 March 2024 16:30 (25 minutes)

Presenter: LIPPINCOTT, Hugh (UCSB)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 7

Type: **not specified**

Astronomical Searches, PBH dark matter

Monday, 25 March 2024 16:55 (25 minutes)

Presenter: KUSENKO, ALEXANDER

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 8

Type: **not specified**

Probing High Energy Particle Physics with Gravitational Waves

Monday, 25 March 2024 17:20 (25 minutes)

Presenter: SCHÜTTE-ENGEL, Jan

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 9

Type: **not specified**

Communicating the Big Picture

Monday, 25 March 2024 18:35 (25 minutes)

Presenter: SIEGAL, Ethan

Session Classification: EC, Culture, and Society

Contribution ID: 10

Type: **not specified**

International Engagement

Presenter: CHENG, Yangyang (Cornell University (US))

Session Classification: EC, Culture, and Society

Contribution ID: 11

Type: **not specified**

International Benchmarking in HEP

Thursday, 28 March 2024 18:35 (25 minutes)

Rescheduled from Monday

Presenter: HOLMES, Tova Ray (University of Tennessee (US))

Session Classification: EC, Culture, and Society

Contribution ID: 12

Type: **not specified**

Axions with HAYSTAC + ALPHA

Tuesday, 26 March 2024 08:25 (25 minutes)

Presenter: MARUYAMA, Reina

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: 13

Type: **not specified**

Light/Ultra-light DM Direct Detection

Tuesday, 26 March 2024 08:50 (25 minutes)

Presenter: KURINSKY, Noah (SLAC/Stanford)

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: 14

Type: **not specified**

Precision for UL DM and Gravitational waves

Tuesday, 26 March 2024 09:45 (25 minutes)

Presenter: AGGARWAL, Nancy (Northwestern University)

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: 15

Type: **not specified**

Quantum Sensors for HEP

Tuesday, 26 March 2024 10:10 (25 minutes)

Presenter: KHATIWADA, Rakshya (Illinois Institute of Technology and Fermilab)

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: 17

Type: **not specified**

Accelerator based DM probes

Tuesday, 26 March 2024 10:35 (25 minutes)

Presenter: PACHAL, Katherine (TRIUMF (CA))

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: **18**

Type: **not specified**

LHC Future Opportunities

Tuesday, 26 March 2024 16:25 (25 minutes)

Presenter: CHANG, Philip (University of Florida (US))

Session Classification: Energy Frontier Exploration

Contribution ID: **19**

Type: **not specified**

FASER + FPF

Thursday, 28 March 2024 17:20 (25 minutes)

Primary author: TORRENCE, Eric (University of Oregon (US))

Presenter: TORRENCE, Eric (University of Oregon (US))

Session Classification: Energy Frontier Exploration

Contribution ID: 20

Type: **not specified**

Educating the next generation

Tuesday, 26 March 2024 17:40 (25 minutes)

Presenter: FREEDMAN, Roger

Session Classification: EC, Culture, and Society

Contribution ID: **21**

Type: **not specified**

LHC Recent Results

Monday, 25 March 2024 18:10 (25 minutes)

Presenter: PEARKES, Jannicke (University of Colorado Boulder (US))

Session Classification: Energy Frontier Exploration

Contribution ID: 22

Type: **not specified**

Run 3 Prospects

Presenter: OHM, Christian (KTH Royal Institute of Technology (SE))

Session Classification: Energy Frontier Exploration

Contribution ID: 23

Type: **not specified**

HL-LHC Upgrades

Tuesday, 26 March 2024 16:00 (25 minutes)

Presenter: YOHA, Rachel (Florida State University (US))

Session Classification: Energy Frontier Exploration

Contribution ID: 24

Type: **not specified**

Public Lecture

Wednesday, 27 March 2024 17:30 (1h 30m)

Presenter: CHANG, Philip (University of Florida (US))

Contribution ID: 25

Type: **not specified**

CMB Physics

Wednesday, 27 March 2024 08:25 (25 minutes)

Presenter: BASU THAKUR, Ritoban

Session Classification: Future of Cosmology

Contribution ID: 27

Type: **not specified**

WIFI: A Novel mechanism for Dark Matter Production

Wednesday, 27 March 2024 08:50 (25 minutes)

Presenters: MONTEFALCONE, Gab (University of Texas at Austin); FREESE, Katherine

Session Classification: Future of Cosmology

Contribution ID: 28

Type: **not specified**

Neutrino Short Baseline

Wednesday, 27 March 2024 09:45 (25 minutes)

Presenter: KARAGIORGI, Georgia

Session Classification: Future of Neutrinos

Contribution ID: 29

Type: **not specified**

Neutrino Long Baseline

Wednesday, 27 March 2024 10:10 (25 minutes)

Presenter: Dr GRAMELLINI, Elena (University of Manchester)

Session Classification: Future of Neutrinos

Contribution ID: **30**

Type: **not specified**

Neutrinoless Double Beta Decay

Wednesday, 27 March 2024 10:35 (25 minutes)

Presenter: GRUSZKO, Julieta (University of North Carolina at Chapel Hill)

Session Classification: Future of Neutrinos

Contribution ID: **31**

Type: **not specified**

Theory motivation for future colliders

Thursday, 28 March 2024 08:00 (25 minutes)

Presenter: HAN, Tao

Session Classification: Energy Frontier Exploration

Contribution ID: 32

Type: **not specified**

Accelerator Technologies

Thursday, 28 March 2024 08:25 (25 minutes)

Presenters: NANNI, Emilio Alessandro; NANNI, Emilio

Session Classification: Energy Frontier Exploration

Contribution ID: **33**

Type: **not specified**

Physics at circular ee

Thursday, 28 March 2024 08:50 (25 minutes)

Presenter: WILLIAMS, Sarah Louise (University of Cambridge (GB))

Session Classification: Energy Frontier Exploration

Contribution ID: 34

Type: **not specified**

Physics at linear ee

Thursday, 28 March 2024 09:45 (25 minutes)

Presenter: VERNIERI, Caterina (SLAC National Accelerator Laboratory (US))

Session Classification: Energy Frontier Exploration

Contribution ID: 35

Type: **not specified**

Physics at future hh

Thursday, 28 March 2024 10:10 (25 minutes)

Presenter: LIPELES, Elliot (University of Pennsylvania (US))

Session Classification: Energy Frontier Exploration

Contribution ID: **36**

Type: **not specified**

Physics at future mumu

Thursday, 28 March 2024 10:35 (25 minutes)

Presenter: CESAROTTI, Cari

Session Classification: Energy Frontier Exploration

Contribution ID: 37

Type: **not specified**

Staging opportunities: Physics

Thursday, 28 March 2024 16:30 (25 minutes)

Presenters: KHAJEH TABRIZI, Zahra; TABRIZI, Zahra (Northwestern University)

Session Classification: Energy Frontier Exploration

Contribution ID: **38**

Type: **not specified**

Collider Instrumentation Challenges

Thursday, 28 March 2024 16:55 (25 minutes)

Presenter: GARCIA-SCIVERES, Maurice (Lawrence Berkeley National Lab. (US))

Session Classification: Energy Frontier Exploration

Contribution ID: 39

Type: **not specified**

Panel: FIPs

Presenters: Prof. CITRON, Matthew; Prof. DUTTA, Valentina

Session Classification: Energy Frontier Exploration

Contribution ID: 40

Type: **not specified**

Underground Lab Challenges

Thursday, 28 March 2024 18:10 (25 minutes)

Presenter: COOLEY, Jodi (SNOLAB)

Session Classification: EC, Culture, and Society

Contribution ID: 41

Type: **not specified**

DC Advocacy

Presenter: PEDRO, Kevin (Fermi National Accelerator Lab. (US))

Session Classification: EC, Culture, and Society

Contribution ID: 42

Type: **not specified**

Opportunities in ML

Friday, 29 March 2024 08:00 (25 minutes)

Presenter: DUARTE, Javier Mauricio (Univ. of California San Diego (US))

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 43

Type: **not specified**

Computing challenges/opportunities

Friday, 29 March 2024 08:25 (25 minutes)

Presenter: SMITH, Nick (Fermi National Accelerator Lab. (US))

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 44

Type: **not specified**

Challenges and Opportunities in Software & Computing for Future Colliders

Friday, 29 March 2024 08:50 (25 minutes)

Presenter: GRAY, Heather (UC Berkeley/LBNL)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 45

Type: **not specified**

Theory Challenges/Opportunities Panel

Friday, 29 March 2024 09:45 (25 minutes)

Presenters: CESAROTTI, Cari; WAGNER, Carlos (The University of Chicago); MONTEFALCONE, Gab (University of Texas at Austin); SCHÜTTE-ENGEL, Jan; KHAJEH TABRIZI, Zahra

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 46

Type: **not specified**

Big Picture Questions Particle Physics - Close Out

Friday, 29 March 2024 10:10 (25 minutes)

Presenters: WAGNER, Carlos E.M.; WAGNER, Carlos (The University of Chicago)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 47

Type: **not specified**

Women In The Equation: Aspen Film Screening of Hidden Figures

Tuesday, 26 March 2024 18:30 (3 hours)

GUEST SPEAKER:

Dr. Nausheen Shah –Associate Professor of Physics at Wayne State University

Screening of Hidden Figures (2016) and the short film Girls Who Code (2022).

Tickets can be purchased at the link.

ACP has a discount code of SoSAF_PartnerTix.

Doors at 6pm.

Contribution ID: 48

Type: **not specified**

Discussion / Q&A

Monday, 25 March 2024 11:00 (30 minutes)

Session Classification: Big Picture, Cross-Frontier Directions

Contribution ID: 49

Type: **not specified**

Poster Session + Pizza

Thursday, 28 March 2024 19:00 (2 hours)

Contribution ID: 50

Type: **not specified**

DC Advocacy

Tuesday, 26 March 2024 17:15 (25 minutes)

Presenter: PEDRO, Kevin (Fermi National Accelerator Lab. (US))

Session Classification: EC, Culture, and Society

Contribution ID: 51

Type: **not specified**

Group Gondola and Lunch (Click to See Description!)

Wednesday, 27 March 2024 11:30 (2 hours)

- “Winter Sightseeing” Gondola Tickets (courtesy of The University of Tennessee, Knoxville)
- Lunch (on your own) at the top of Aspen Mountain

During the morning session, communicate to the organizers if you’d like to join so that we can get a headcount, and we will leave the center together to purchase tickets as a group.

Contribution ID: 52

Type: **not specified**

Post-Dinner Drinks+Karaoke at Silver City Mountain Saloon (Click to see description)

Monday, 25 March 2024 21:00 (1 hour)

Your first drink is on us, courtesy of the University of Tennessee, Knoxville.

<https://www.silvercityaspen.com>

Contribution ID: 53

Type: **not specified**

Precision for UL DM and Gravitational waves

Presenter: AGGARWAL, Nancy (Northwestern University)

Session Classification: Future of DM and Astroparticle Physics

Contribution ID: 54

Type: **not specified**

Group Photo at ACP

Wednesday, 27 March 2024 11:00 (5 minutes)