

26th Accelerator Test Facility Users' Meeting

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Tuesday, 26 March 2024 10:30 (5 minutes)

Session Classification: Opening Session

Contribution ID: 2

Type: **not specified**

Meeting Logistics and Opening Remarks

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

Presenter: PALMER, Mark (Brookhaven National Laboratory)

Session Classification: Opening Session

Contribution ID: 3

Type: **not specified**

ATF Operations Status Report

Tuesday, 26 March 2024 10:45 (20 minutes)

Presenter: POGORELSKY, Igor (BNL/CAD)

Session Classification: Opening Session

Contribution ID: 4

Type: **not specified**

Comments from DOE ARDAP

Tuesday, 26 March 2024 11:45 (15 minutes)

Presenter: COLBY, Eric (U. S. DOE)

Session Classification: Opening Session

Contribution ID: 5

Type: **not specified**

Facilities Modifications Status

Tuesday, 26 March 2024 11:05 (20 minutes)

Presenter: SIMMONDS, Andrew

Session Classification: Opening Session

Contribution ID: 6

Type: **not specified**

Accelerator Readiness Review & FY24/25 Running Plans

Tuesday, 26 March 2024 11:25 (20 minutes)

Presenter: PALMER, Mark (Brookhaven National Laboratory)

Session Classification: Opening Session

Contribution ID: 7

Type: **not specified**

TBD 1

Session Classification: Status Reports & New Proposals

Contribution ID: 8

Type: **not specified**

TBD 2

Session Classification: Status Reports & New Proposals

Contribution ID: 9

Type: **not specified**

TBD 3

Session Classification: Status Reports & New Proposals

Contribution ID: **10**

Type: **not specified**

TBD 4

Session Classification: Status Reports & New Proposals

Contribution ID: **11**

Type: **not specified**

TBD 1

Session Classification: Status Reports & Close Outs

Contribution ID: 12

Type: **not specified**

AE93 – Direct Measurement of Fields and Radiation in the Self-Modulated Plasma Wakefield Regime

Tuesday, 26 March 2024 13:00 (25 minutes)

Presenter: VAF AEI-NAJAFABADI, Navid (Stony Brook University)

Session Classification: Status Reports & Close Outs

Contribution ID: 13

Type: **not specified**

AE95 – Relativistic electron beams from CO₂-laser-driven wakefield accelerators

Tuesday, 26 March 2024 13:25 (25 minutes)

Presenter: DOWNER, Michael (University of Texas at Austin)

Session Classification: Status Reports & Close Outs

Contribution ID: 14

Type: **not specified**

AE98 – Probing electron Weibel instability in optical field-ionized plasmas using ultrashort electron bunches

Tuesday, 26 March 2024 13:50 (25 minutes)

Presenter: SINCLAIR, Mitchell (UCLA)

Session Classification: Status Reports & Close Outs

Contribution ID: 15

Type: **not specified**

AE100 – The Study of High-Intensity Laser Pulse Interactions with Near-Critical Density Plasmas

Tuesday, 26 March 2024 14:35 (25 minutes)

Presenter: ETTLINGER, Oliver (Imperial College London)

Session Classification: Status Reports & Close Outs

Contribution ID: 16

Type: **not specified**

AE101 – Optical Materials for Ultrahigh-Power Long-Wave Infrared Lasers

Tuesday, 26 March 2024 15:00 (25 minutes)

Presenter: POLYANSKIY, Mikhail (Brookhaven National Laboratoty)

Session Classification: Status Reports & Close Outs

Contribution ID: 17

Type: **not specified**

TBD 6

Session Classification: Status Reports & Close Outs

Contribution ID: **18**

Type: **not specified**

AE116 – Intelligent Laser Control with Uncertainty Quantification for Electron Beam Generation

Presenter: ASLAM, Aasma

Session Classification: Status Reports & Close Outs

Contribution ID: 19

Type: **not specified**

AE108 – Development of Wavelength Conversion Techniques for Generation of Coherent Radiation at the Mid- to Long-wave Infrared

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

Presenter: LI, William (BNL)

Session Classification: Status Reports & Close Outs

Contribution ID: 20

Type: **not specified**

AE120 – Characterization of the Collinear Wakefield Accelerator Module

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

Presenter: ZHOLENTS, Alexander (ANL)

Session Classification: Status & Closeout Reports

Contribution ID: 21

Type: **not specified**

AE121 –High-efficiency Laser-driven Electron Accelerator

Wednesday, 27 March 2024 11:00 (20 minutes)

Presenter: FUCHS, Matthias

Session Classification: Status & Closeout Reports

Contribution ID: 22

Type: **not specified**

AE124 – Simulation-aided Instrument Optimization using Artificial Intelligence and Machine Learning Methods

Wednesday, 27 March 2024 11:20 (20 minutes)

Presenter: MORRIS, Thomas (Brookhaven National Laboratory)

Session Classification: Status & Closeout Reports

Contribution ID: 23

Type: **not specified**

NP-Enabling R&D for Advanced M/L-WIR Laser Concepts

Wednesday, 27 March 2024 15:50 (30 minutes)

Presenter: POLYANSKIY, Mikhail (Brookhaven National Laboratoty)

Session Classification: Status Reports & New Proposals

Contribution ID: 24

Type: **not specified**

AE129 – Advanced Accelerator and Laser Laboratory Course

Thursday, 28 March 2024 10:55 (20 minutes)

Presenter: FEDURIN, Mikhail (BNL)

Session Classification: Status Reports & New Proposals

Contribution ID: 25

Type: **not specified**

AE131 - Harmonic Nonlinear Inverse Compton Scattering

Wednesday, 27 March 2024 11:40 (20 minutes)

Presenter: SAKAI, Yusuke (UCLA)

Session Classification: Status & Closeout Reports

Contribution ID: 26

Type: **not specified**

TBD 14 New Proposal

Session Classification: Status Reports & New Proposals

Contribution ID: 27

Type: **not specified**

NP-315765: Tunable laser positron source

Wednesday, 27 March 2024 13:30 (30 minutes)

Presenter: SAHAI, Aakash (Univ of Colorado)

Session Classification: Status Reports & New Proposals

Contribution ID: **28**

Type: **not specified**

TBD 16 New Proposal

Session Classification: Status Reports & New Proposals

Contribution ID: 29

Type: **not specified**

AE128 – Ionization Currents and Secondary Radiation from Two-Color Pulses at Long Laser Wavelengths

Thursday, 28 March 2024 10:35 (20 minutes)

Presenter: ALEXANDER, Englesbe (United States Naval Research Laboratory (NRL))

Session Classification: Status Reports & New Proposals

Contribution ID: **30**

Type: **not specified**

TBD 18

Session Classification: Status Reports & New Proposals

Contribution ID: **31**

Type: **not specified**

TBD 19

Session Classification: Status Reports & New Proposals

Contribution ID: **32**

Type: **not specified**

TBD 20

Session Classification: Status Reports & New Proposals

Contribution ID: **33**

Type: **not specified**

TBD 21

Session Classification: Status Reports & New Proposals

Contribution ID: 34

Type: **not specified**

NP-315769: Toward the bubble regime of CO₂-laser-driven plasma wakefield acceleration

Wednesday, 27 March 2024 13:00 (30 minutes)

Presenter: DOWNER, Michael (University of Texas at Austin)

Session Classification: Status Reports & New Proposals

Contribution ID: 35

Type: **not specified**

NP-315759: Optical probing of simultaneous Biermann battery and Weibel instability generated magnetic fields in over critical density plasma

Wednesday, 27 March 2024 14:00 (30 minutes)

Presenter: FARRELL, Audrey (UCLA)

Session Classification: Status Reports & New Proposals

Contribution ID: **36**

Type: **not specified**

TBD 24 New Proposal

Session Classification: Status Reports & New Proposals

Contribution ID: 37

Type: **not specified**

NP-315766: Ultrafast Electron Radiography of LWFA

Wednesday, 27 March 2024 14:50 (30 minutes)

Presenter: VAFAEI-NAJAFABADI, Navid (Stony Brook University)

Session Classification: Status Reports & New Proposals

Contribution ID: **38**

Type: **not specified**

NP-315758: High-intensity laser interactions with near-critical density plasmas

Wednesday, 27 March 2024 15:20 (30 minutes)

Presenter: ETTLINGER, Oliver (Imperial College London)

Session Classification: Status Reports & New Proposals

Contribution ID: 39

Type: **not specified**

Announcements & Session Intro

Wednesday, 27 March 2024 10:30 (5 minutes)

Session Classification: Status & Closeout Reports

Contribution ID: 40

Type: **not specified**

Announcements & Session Intro

Thursday, 28 March 2024 10:30 (5 minutes)

Session Classification: Status Reports & New Proposals

Contribution ID: **41**

Type: **not specified**

TBD 27

Session Classification: Status Reports & New Proposals

Contribution ID: **42**

Type: **not specified**

TBD 28

Session Classification: Status Reports & New Proposals

Contribution ID: 43

Type: **not specified**

Facility Updates and Plans

Session Classification: Closing Session

Contribution ID: 44

Type: **not specified**

Science Priority Research Directions & Next Science Planning Workshop

Thursday, 28 March 2024 11:25 (30 minutes)

Presenter: VAF AEI-NAJAFABADI, Navid (Brookhaven National Laboratory)

Session Classification: Closing Session

Contribution ID: 45

Type: **not specified**

Closeout

Thursday, 28 March 2024 11:55 (5 minutes)

Presenter: PALMER, Mark (Brookhaven National Laboratory)

Session Classification: Closing Session