

22nd Accelerator Test Facility Users' Meeting

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Tuesday, 3 December 2019 13:00 (10 minutes)

Presenter: GIBBS, Doon (Brookhaven National Laboratory)

Session Classification: Opening and Operations Updates

Contribution ID: 2

Type: **not specified**

User Meeting Overview

Tuesday, 3 December 2019 13:10 (5 minutes)

Presenter: PALMER, Mark (BNL)

Session Classification: Opening and Operations Updates

Contribution ID: 3

Type: **not specified**

ATF Operations Status

Tuesday, 3 December 2019 13:30 (15 minutes)

Presenter: PALMER, Mark (BNL)

Session Classification: Opening and Operations Updates

Contribution ID: 19

Type: **not specified**

High Efficiency Waveguide THz FEL (ID 306039, EBeam)

Wednesday, 4 December 2019 09:00 (25 minutes)

Presenter: MUSUMECI, Pietro (UCLA Department of Physics and Astronomy)

Session Classification: New Proposals

Contribution ID: 20

Type: **not specified**

The Study of High-Intensity Laser Pulse Interactions with Near-Critical Density Plasmas (ID 306044, CO2)

Wednesday, 4 December 2019 09:25 (25 minutes)

Presenters: ETTLINGER, Oliver (Imperial College London); NAJMUDIN, Zulfikar (Imperial College London)

Session Classification: New Proposals

Contribution ID: 21

Type: **not specified**

Probing Electron Weibel Instability in Optical Field-Ionized Plasma Using Ultrashort Electron Bunches (ID 306033, EBeam + Laser)

Wednesday, 4 December 2019 15:40 (25 minutes)

Presenter: ZHANG, Chaojie (UCLA)

Session Classification: New Proposals

Contribution ID: 22

Type: **not specified**

A Compact, Tunable Plasma-Based Beam Dump (ID 306037, EBeam)

Wednesday, 4 December 2019 11:25 (25 minutes)

Presenters: SAHAI, Aakash; BONATTO, Alexandre (University of Manchester)

Session Classification: New Proposals

Contribution ID: 23

Type: **not specified**

Tunable Positron Source: CO2-Laser wakefields to post-process positron-electron jets (ID 306024, EBeam + Laser)

Wednesday, 4 December 2019 11:50 (25 minutes)

Presenter: SAHAI, Aakash

Session Classification: New Proposals

Contribution ID: 25

Type: **not specified**

AE63 - Stony Brook Accelerator Laboratory Course, CASE@ATF

Tuesday, 3 December 2019 15:30 (15 minutes)

Status Report

Presenter: FEDURIN, Mikhail (BNL)

Session Classification: Experimental Status/Closeout Reports

Contribution ID: 27

Type: **not specified**

UE80 - Non-Equilibrium Phenomena w/UED

Tuesday, 3 December 2019 15:45 (15 minutes)

Closeout Report

Presenter: TAO, Jing (Brookhaven National Laboratory)

Session Classification: Experimental Status/Closeout Reports

Contribution ID: 28

Type: **not specified**

UE82 - Thermal Transport in Thermoelectric Materials

Tuesday, 3 December 2019 16:00 (15 minutes)

Status Report

Presenter: LI, Junjie (Brookhaven national Lab)

Session Classification: Experimental Status/Closeout Reports

Contribution ID: **30**

Type: **not specified**

AE85 - Multi atmospheric CO2 Amplifier Optically Pumped by a 4.3 micron FeZnSe Laser

Tuesday, 3 December 2019 16:30 (15 minutes)

Status Report

Presenters: POGORELSKY, Igor (BNL/CAD); PIGEON, Jeremy (UCLA); TOCHITSKY, Sergei (UCLA)

Session Classification: Experimental Status/Closeout Reports

Contribution ID: **32**

Type: **not specified**

AE87 - Hard X-ray ICS

Wednesday, 4 December 2019 13:25 (15 minutes)

Status Report

Presenter: SAKAI, Yusuke (UCLA)

Session Classification: Status Reports

Contribution ID: 33

Type: **not specified**

AE88 - Electron Beam Formation via Ionization Injection for Next Generation Accelerator R&D

Wednesday, 4 December 2019 14:10 (15 minutes)

Status Report

Presenter: KUPFER, Rotem

Session Classification: Status Reports

Contribution ID: 34

Type: **not specified**

AE89 - Plasma Compression for Terawatt Long Wavelength Lasers

Tuesday, 3 December 2019 16:45 (15 minutes)

Status Report

Presenter: GORDON, Daniel (Naval Research Laboratory)

Session Classification: Experimental Status/Closeout Reports

Contribution ID: 35

Type: **not specified**

AF90 - Plasma Beam Dump Feasibility Study

Wednesday, 4 December 2019 13:15 (10 minutes)

Status Report

Presenter: SAHAI, Aakash

Session Classification: Status Reports

Contribution ID: 37

Type: **not specified**

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

Wednesday, 4 December 2019 13:40 (15 minutes)

Status Report

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

Session Classification: Status Reports

Contribution ID: 39

Type: **not specified**

AE95 - Optical Diagnosis of Self-Modulated CO₂-laser Driven Plasma Wakes

Wednesday, 4 December 2019 13:55 (15 minutes)

Status Report

Presenter: ZGADZAJ, Rafal (The University of Texas at Austin)

Session Classification: Status Reports

Contribution ID: 40

Type: **not specified**

UF96 - UEM Timing Stability Study

Tuesday, 3 December 2019 16:15 (15 minutes)

Status Report

Presenter: YANG, Xi

Session Classification: Experimental Status/Closeout Reports

Contribution ID: 43

Type: **not specified**

Comments from the US DOE

Tuesday, 3 December 2019 13:15 (15 minutes)

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

Session Classification: Opening and Operations Updates

Contribution ID: 44

Type: **not specified**

Structural phase transition and phonon excitation in non-equilibrium Cu₂S (UED)

Wednesday, 4 December 2019 16:55 (25 minutes)

Presenter: TAO, Jing (Brookhaven National Laboratory)

Session Classification: New Proposals

Contribution ID: 45

Type: **not specified**

Charge Order and Lattice Dynamics in Photoexcited Cuprates and Iridates (UED)

Wednesday, 4 December 2019 17:20 (25 minutes)

Presenter: TAO, Jing (Brookhaven National Laboratory)

Session Classification: New Proposals

Contribution ID: 46

Type: **not specified**

Structure phase transition in Weyl semimetal MoTe₂ (UED)

Wednesday, 4 December 2019 17:45 (25 minutes)

Presenter: LI, Junjie (Brookhaven national Lab)

Session Classification: New Proposals

Contribution ID: 47

Type: **not specified**

Demonstration of Feasibility of Sub-nm, Picosecond Electron Microscope for the Life Sciences (ID: 305506, UED)

Wednesday, 4 December 2019 16:30 (25 minutes)

Presenter: YANG, Xi

Session Classification: New Proposals

Contribution ID: 48

Type: **not specified**

Directional X-ray Radiation Produced by a Ultra-short Period Plasma Magneto-static Undulator (ID: 306041, EBeam + Laser)

Wednesday, 4 December 2019 16:05 (25 minutes)

Presenter: Prof. JOSHI, Chan (UCLA)

Session Classification: New Proposals

Contribution ID: 49

Type: **not specified**

Collinear Wakefield Accelerator Based on Corrugated Waveguide (ID: 306051, EBeam)

Wednesday, 4 December 2019 10:15 (25 minutes)

Presenter: ZHOLENTS, Alexander (Argonne National Laboratory)

Session Classification: New Proposals

Contribution ID: 51

Type: **not specified**

LWIR Laser Progress

Tuesday, 3 December 2019 13:45 (20 minutes)

Presenter: POLYANSKIY, Mikhail (Brookhaven National Laboratory)

Session Classification: Opening and Operations Updates

Contribution ID: 52

Type: **not specified**

Electron Beam Status and Plans

Tuesday, 3 December 2019 14:05 (15 minutes)

Presenter: FEDURIN, Mikhail (BNL)

Session Classification: Opening and Operations Updates

Contribution ID: 53

Type: **not specified**

Status of Combined E-Beam+Laser Capabilities

Tuesday, 3 December 2019 14:20 (25 minutes)

Presenter: POGORELSKY, Igor (BNL/CAD)

Session Classification: Opening and Operations Updates

Contribution ID: 54

Type: **not specified**

UED Status and Plans

Tuesday, 3 December 2019 14:45 (20 minutes)

Presenter: BABZIEN, Marcus (BNL)

Session Classification: Opening and Operations Updates

Contribution ID: 55

Type: **not specified**

Experimental Investigation of Proton Stopping and Proton-Boron Fusion Reactions (ID: 306042, CO2)

Wednesday, 4 December 2019 09:50 (25 minutes)

Presenter: CHEN, Chiping (Electron Power Systems Inc.)

Session Classification: New Proposals

Contribution ID: 56

Type: **not specified**

Two Beam Acceleration Using Solid-State Active Medium (ID: 306048, EBeam)

Wednesday, 4 December 2019 11:00 (25 minutes)

Presenters: SCHACHTER, Levi (Technion); KIMURA, Wayne (STI Optronics, Inc.)

Session Classification: New Proposals

Contribution ID: 57

Type: **not specified**

Optical Materials for Ultrahigh-Power Long- Wave Infrared Pulses (ID: 306047, CO2)

Wednesday, 4 December 2019 15:15 (25 minutes)

Presenter: POLYANSKIY, Mikhail (Brookhaven National Laboratoty)

Session Classification: New Proposals

Contribution ID: **63**

Type: **not specified**

ATF Science Planning Workshop Outcomes

Thursday, 5 December 2019 09:30 (30 minutes)

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

Session Classification: Science Planning Workshop Outcomes

Contribution ID: **64**

Type: **not specified**

Discussion with the ATF User Community

Thursday, 5 December 2019 10:00 (15 minutes)

Session Classification: Science Planning Workshop Outcomes

Contribution ID: 65

Type: **not specified**

Introduction

Thursday, 5 December 2019 10:30 (10 minutes)

Presenter: PALMER, Mark (BNL)

Session Classification: ATF Next Steps

Contribution ID: **66**

Type: **not specified**

Key Facility Modifications

Thursday, 5 December 2019 10:40 (20 minutes)

Presenter: CULLEN, Christian (BNL)

Session Classification: ATF Next Steps

Contribution ID: 67

Type: **not specified**

Prioritizing the ATF Development Plans

Thursday, 5 December 2019 11:00 (20 minutes)

Presenter: PALMER, Mark (BNL)

Session Classification: ATF Next Steps

Contribution ID: **68**

Type: **not specified**

Discussion

Thursday, 5 December 2019 11:20 (20 minutes)

Session Classification: ATF Next Steps

Contribution ID: 69

Type: **not specified**

Electron-beam characterization sensors based on lithium niobate modulators (ID: 306060, E-Beam)

Thursday, 5 December 2019 11:40 (25 minutes)

Presenter: RABIEL, Payam

Session Classification: ATF Next Steps