

# **Science and Applications of Plasma Wakefield Acceleration**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

*Monday, 16 May 2022 08:45 (15 minutes)*

Contribution ID: 2

Type: **not specified**

## Introduction

*Monday, 16 May 2022 09:00 (5 minutes)*

**Presenter:** MAIER, Andreas

**Session Classification:** Light Source Application

Contribution ID: 3

Type: **not specified**

# **X-Ray Free-Electron Lasers: State of the Art and Opportunities for Advanced Particle Accelerators**

*Monday, 16 May 2022 09:05 (30 minutes)*

**Presenter:** MARINELLI, Agostino

**Session Classification:** Light Source Application

Contribution ID: 4

Type: **not specified**

# **Laser Plasma Accelerators: Next Generation X-Ray Light Sources**

*Monday, 16 May 2022 09:35 (30 minutes)*

**Presenter:** ALBERT, Félicie

**Session Classification:** Light Source Application

Contribution ID: 5

Type: **not specified**

## Discussion

*Monday, 16 May 2022 10:05 (25 minutes)*

**Session Classification:** Light Source Application

Contribution ID: 6

Type: **not specified**

## Introduction

*Monday, 16 May 2022 11:00 (5 minutes)*

**Presenter:** GSCHWENDTNER, Edda

**Session Classification:** Particle Physics Applications

Contribution ID: 7

Type: **not specified**

# HEP Applications of Plasma Wakefield Accelerators

*Monday, 16 May 2022 11:05 (30 minutes)*

**Presenter:** HEINEMANN, Beate

**Session Classification:** Particle Physics Applications



Contribution ID: 8

Type: **not specified**

## **Applications of Plasma-Wave Acceleration Techniques to Particle Colliders**

*Monday, 16 May 2022 11:35 (30 minutes)*

**Presenter:** FOSTER, Brian

**Session Classification:** Particle Physics Applications

Contribution ID: 9

Type: **not specified**

## Discussion

*Monday, 16 May 2022 12:05 (25 minutes)*

**Session Classification:** Particle Physics Applications

Contribution ID: **10**

Type: **not specified**

## **Introduction**

*Monday, 16 May 2022 14:00 (5 minutes)*

**Presenter:** SCHREIBER, Jörg

**Session Classification:** Health and Industrial Applications

Contribution ID: 11

Type: **not specified**

## **Laser Plasma Accelerators to Address the Industrial Inspection Market**

*Monday, 16 May 2022 14:05 (30 minutes)*

**Presenter:** SYLLA, François

**Session Classification:** Health and Industrial Applications

Contribution ID: 12

Type: **not specified**

# **Establishing Laser Accelerated Proton Beam Performance for Dose Controlled Irradiation Studies**

*Monday, 16 May 2022 14:35 (30 minutes)*

**Presenter:** SCHRAMM, Ulrich

**Session Classification:** Health and Industrial Applications

Contribution ID: 13

Type: **not specified**

## Discussion

*Monday, 16 May 2022 15:05 (25 minutes)*

**Session Classification:** Health and Industrial Applications

Contribution ID: 14

Type: **not specified**

## Introduction

*Monday, 16 May 2022 16:00 (5 minutes)*

**Presenter:** VAY, Jean-Luc

**Session Classification:** Simulation / Theory

Contribution ID: 15

Type: **not specified**

## **Theoretical Basis and Exascale Simula- tions**

*Monday, 16 May 2022 16:05 (30 minutes)*

**Presenter:** THÉVENET, Maxence

**Session Classification:** Simulation / Theory



Contribution ID: 16

Type: **not specified**

## **Laser-Electron Collisions and Laser- Plasma Interaction in QED Regime (Theory and Simulations)**

*Monday, 16 May 2022 16:35 (30 minutes)*

**Presenter:** VRANIĆ, Marija

**Session Classification:** Simulation / Theory

Contribution ID: 17

Type: **not specified**

## Discussion

*Monday, 16 May 2022 17:05 (25 minutes)*

**Session Classification:** Simulation / Theory

Contribution ID: **18**

Type: **not specified**

## **Introduction**

*Tuesday, 17 May 2022 09:00 (5 minutes)*

**Presenter:** LIMPERT, Jens

**Session Classification:** .

Contribution ID: 19

Type: **not specified**

## **Ti:Sapphire Lasers as Drivers for Plasma-Based Accelerators**

*Tuesday, 17 May 2022 09:05 (30 minutes)*

**Presenter:** KARSCH, Stefan

**Session Classification:** .

Contribution ID: 20

Type: **not specified**

## Laser Technology for LWFA

*Tuesday, 17 May 2022 09:35 (30 minutes)*

**Presenter:** CORNER, Laura

**Session Classification:** .

Contribution ID: 21

Type: **not specified**

## Discussion

*Tuesday, 17 May 2022 10:05 (25 minutes)*

**Session Classification:** .

Contribution ID: 22

Type: **not specified**

## Introduction

*Tuesday, 17 May 2022 11:00 (5 minutes)*

**Presenter:** MUGGLI, Patric

**Session Classification:** .

Contribution ID: 23

Type: **not specified**

## Overview of Plasma Technology for Accelerators

*Tuesday, 17 May 2022 11:05 (30 minutes)*

**Presenter:** CROS, Brigitte

**Session Classification:** .



Contribution ID: 24

Type: **not specified**

# Optical Guiding of High Intensity Laser Pulses for Laser Wakefield Acceleration

*Tuesday, 17 May 2022 11:35 (30 minutes)*

**Presenter:** MILCHBERG, Howard

**Session Classification:** .

Contribution ID: 25

Type: **not specified**

## Discussion

*Tuesday, 17 May 2022 12:05 (25 minutes)*

**Session Classification:** .

Contribution ID: 26

Type: **not specified**

## Introduction

*Wednesday, 18 May 2022 09:00 (5 minutes)*

**Presenter:** JENKO, Frank

**Session Classification:** Plasma Astrophysics

Contribution ID: 27

Type: **not specified**

## **Cosmic-Ray Driven Instabilities**

*Wednesday, 18 May 2022 09:05 (30 minutes)*

**Presenter:** FIUZA, Frederico

**Session Classification:** Plasma Astrophysics

Contribution ID: 28

Type: **not specified**

# The Surprising Effectiveness of Cosmic Ray Acceleration

*Wednesday, 18 May 2022 09:35 (30 minutes)*

**Presenter:** BELL, Tony

**Session Classification:** Plasma Astrophysics

Contribution ID: 29

Type: **not specified**

## Discussion

*Wednesday, 18 May 2022 10:05 (25 minutes)*

**Session Classification:** Plasma Astrophysics

Contribution ID: **30**

Type: **not specified**

## **Introduction**

*Wednesday, 18 May 2022 11:00 (5 minutes)*

**Presenter:** DOWNER, Mike

**Session Classification:** Diagnostics

Contribution ID: 31

Type: **not specified**

## **High-Resolution Diagnostics for Plasma-Based Accelerators - a Tool for Detailed Insights into the Interaction**

*Wednesday, 18 May 2022 11:05 (30 minutes)*

**Presenter:** KALUZA, Malte

**Session Classification:** Diagnostics



Contribution ID: 32

Type: **not specified**

## Electron Beam Diagnostics

*Wednesday, 18 May 2022 11:35 (30 minutes)*

**Presenter:** CHIADRONI, Enrica

**Session Classification:** Diagnostics

Contribution ID: 33

Type: **not specified**

## Discussion

*Wednesday, 18 May 2022 12:05 (25 minutes)*

**Session Classification:** Diagnostics

Contribution ID: **34**

Type: **not specified**

## **Introduction**

*Wednesday, 18 May 2022 14:00 (5 minutes)*

**Presenter:** THÉVENET, Maxence

**Session Classification:** .

Contribution ID: 35

Type: **not specified**

# Overview of Gaussian Processes and Bayesian Optimization for Plasma- Based Accelerators

*Wednesday, 18 May 2022 14:05 (30 minutes)*

**Presenter:** LEHE, Remi

**Session Classification:** .

Contribution ID: 36

Type: **not specified**

## **Overview of Adaptive Machine Learning Methods: Towards Virtual 6D Phase Space Diagnostics**

*Wednesday, 18 May 2022 14:35 (30 minutes)*

**Presenter:** SCHEINKER, Alexander

**Session Classification:** .

Contribution ID: 37

Type: **not specified**

## Discussion

*Wednesday, 18 May 2022 15:05 (25 minutes)*

**Session Classification:** .