

UK XFEL Townhall - Fundamental Physics, Quantum Computing and AI



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome Address: Prof Kevin Jones - Deputy Vice-Chancellor (Research and Innovation)

Thursday, 18 January 2024 11:10 (10 minutes)

Presenter: Prof. JONES, Kevin (University of Plymouth)

Session Classification: Welcome with Tea & Coffee

Contribution ID: 2

Type: **not specified**

Welcome Address: Prof Alexander Belton - Head of School (Engineering, Computing and Mathematics)

Thursday, 18 January 2024 11:20 (10 minutes)

Presenter: Prof. BELTON, Alexander (University of Plymouth)

Session Classification: Welcome with Tea & Coffee

Contribution ID: 3

Type: **not specified**

Opening Address: Dr Shakil Awan - Local Technical Committee

Thursday, 18 January 2024 11:00 (10 minutes)

Presenter: Dr AWAN, Shakil (University of Plymouth)

Session Classification: Welcome with Tea & Coffee

Contribution ID: 4

Type: **not specified**

Few-fs atomic resolution movies of a photoactive protein traversing a conical intersection

Thursday, 18 January 2024 13:45 (30 minutes)

Presenter: Dr OURMAZD, Abbas (University of Wisconsin-Milwaukee)

Session Classification: Session 2

Contribution ID: 5

Type: **not specified**

On Spectral domain ghost imaging

Thursday, 18 January 2024 14:45 (30 minutes)

Presenter: Dr CRYAN, James (Linac coherent light source (SLAC))

Session Classification: Session 2

Contribution ID: 6

Type: **not specified**

Applying AI to complex problems in the physical sciences

Thursday, 18 January 2024 16:00 (30 minutes)

Presenter: Dr SANCHEZ GONZALEZ, Alvaro (Google DeepMind)

Session Classification: Session 3

Contribution ID: 7

Type: **not specified**

Challenges and Opportunities from Electronic Structure Calculations of Systems at the Nanoscale

Thursday, 18 January 2024 16:30 (30 minutes)

Presenter: Dr GENOVESE, Luigi (CEA Grenoble)

Session Classification: Session 3

Contribution ID: 8

Type: **not specified**

EPR experiments and XFELs

Friday, 19 January 2024 10:00 (30 minutes)

Presenter: Prof. SMITH, Graham (St Andrews)

Session Classification: Session 4

Contribution ID: 9

Type: **not specified**

Measuring Unruh radiation from accelerated electrons

Thursday, 18 January 2024 14:15 (30 minutes)

Presenter: Prof. GREGORI, Gianluca (University of Oxford)

Session Classification: Session 2

Contribution ID: **10**

Type: **not specified**

Opportunities in nonlinear classical and quantum physics with intense XFELs

Friday, 19 January 2024 10:30 (30 minutes)

Presenter: Dr BLACKBURN, Tom (Gothenburg)

Session Classification: Session 4

Contribution ID: 11

Type: **not specified**

Fundamental Physics with XFELs

Friday, 19 January 2024 11:30 (30 minutes)

Presenter: Prof. SCHUETZHOLD, Ralf (Helmholtz Zentrum Dresden-Rosendorf)

Session Classification: Session 5

Contribution ID: 12

Type: **not specified**

On covariance mapping and multi-dimensional extensions

Friday, 19 January 2024 12:00 (30 minutes)

Presenter: Dr FRASINSKI, Leszek (Imperial College London)

Session Classification: Session 5

Contribution ID: 13

Type: **not specified**

Real-time visualization of conical intersections in biomolecules using XFELs

Thursday, 18 January 2024 17:00 (30 minutes)

Presenter: Dr CERULLO, Giulio (Polytecnico di Milano)

Session Classification: Session 3

Contribution ID: 14

Type: **not specified**

Physics using XFELs and high intensity lasers

Friday, 19 January 2024 13:30 (30 minutes)

Presenter: Prof. MANGLES, Stuart (Imperial College London)

Session Classification: Session 6

Contribution ID: 15

Type: **not specified**

Novel capabilities from plasma wakefield-based high-brightness X-FELs

Friday, 19 January 2024 14:00 (30 minutes)

Presenter: Prof. HIDDING, Bernhard (Düsseldorf)

Session Classification: Session 6

Contribution ID: 16

Type: **not specified**

Developing a National Strategy for Quantum Technology

Thursday, 18 January 2024 18:00 (20 minutes)

Presenter: Prof. KNIGHT, Sir Peter (Imperial College London)

Session Classification: Drinks Reception

Contribution ID: 17

Type: **not specified**

Electron Paramagnetic Resonance - an overview from the National Research Facility for EPR

Friday, 19 January 2024 09:30 (30 minutes)

Presenter: Dr BOWEN, Alice (University of Manchester)

Session Classification: Session 4

Contribution ID: **18**

Type: **not specified**

UK XFEL Conceptual Design and Options Analysis Project

Thursday, 18 January 2024 11:30 (30 minutes)

Presenters: DUNNING, David (STFC); ADEN, Paul (STFC)

Session Classification: Session 1 - UK XFEL Overview

Contribution ID: 19

Type: **not specified**

Overview of UK XFEL Science and Technology Case

Thursday, 18 January 2024 12:00 (30 minutes)

Presenters: MARANGOS, Jon (Imperial College London); INGLE, Rebecca (UCL)

Session Classification: Session 1 - UK XFEL Overview

Contribution ID: 20

Type: **not specified**

Forum - open discussion

Thursday, 18 January 2024 12:30 (30 minutes)

Session Classification: Session 1 - UK XFEL Overview

Contribution ID: 21

Type: **not specified**

Towards a FEL-based "fundamental physics" facility

Thursday, 18 January 2024 15:45 (15 minutes)

Presenter: Prof. BOOGERT, Stewart (Cockcroft Institute)

Session Classification: Session 3