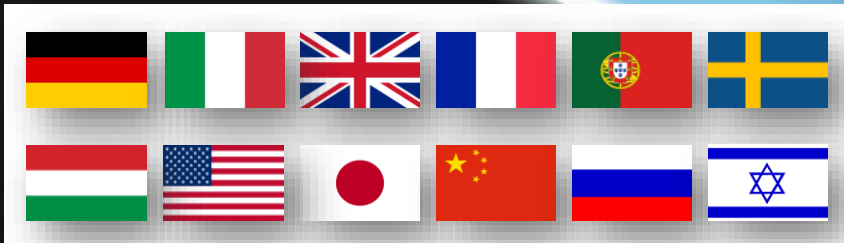


EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



WP8: Dissemination & Outreach

Ricardo Torres / University of Liverpool



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 653782.



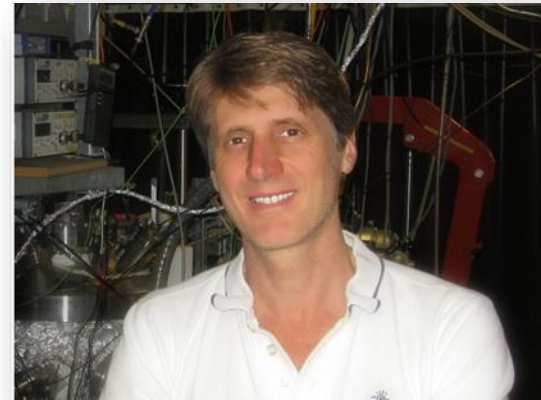
QUANTUM LEAP TOWARDS THE
NEXT GENERATION OF ACCELERATORS

Liverpool Convention Centre – 6th July 2018

Dr Ceri Brenner, STFC
Dream beams



Prof John Tisch, Imperial College London
A glimpse into the science and technology
of attosecond light sources

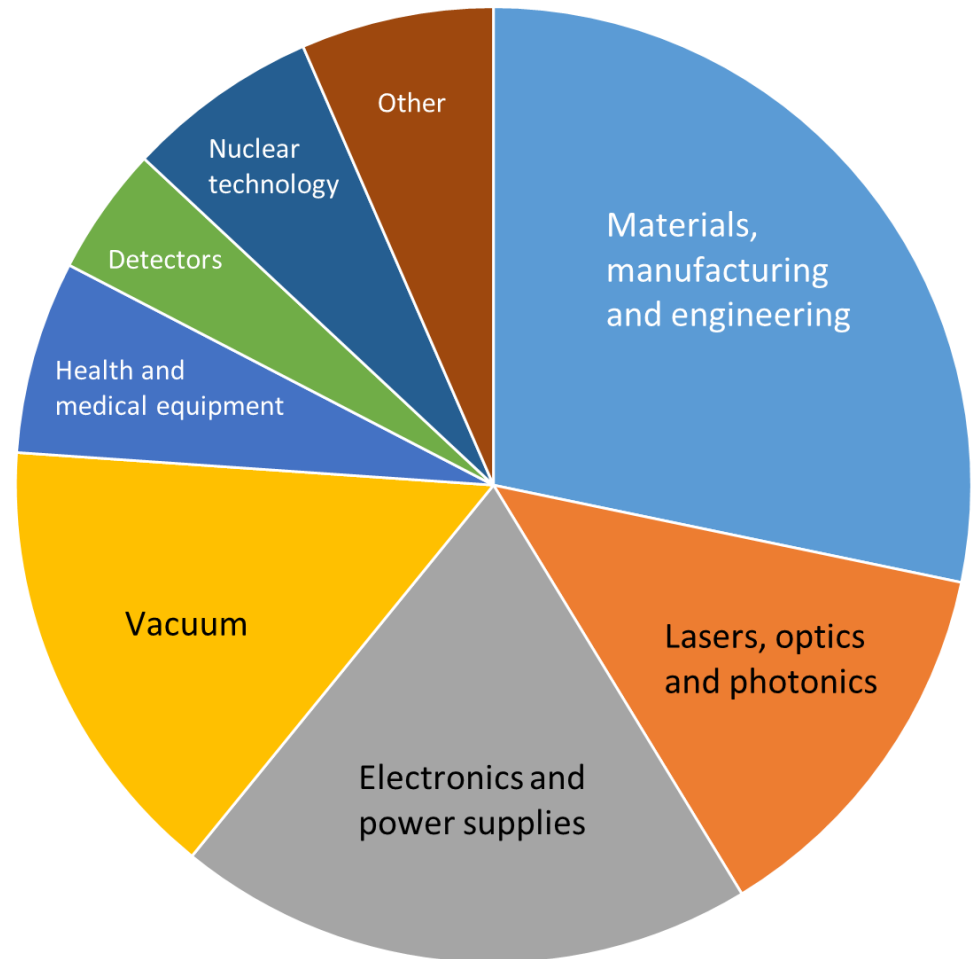


**Prof Peter Weightman, University of
Liverpool**
Probing the secret of life



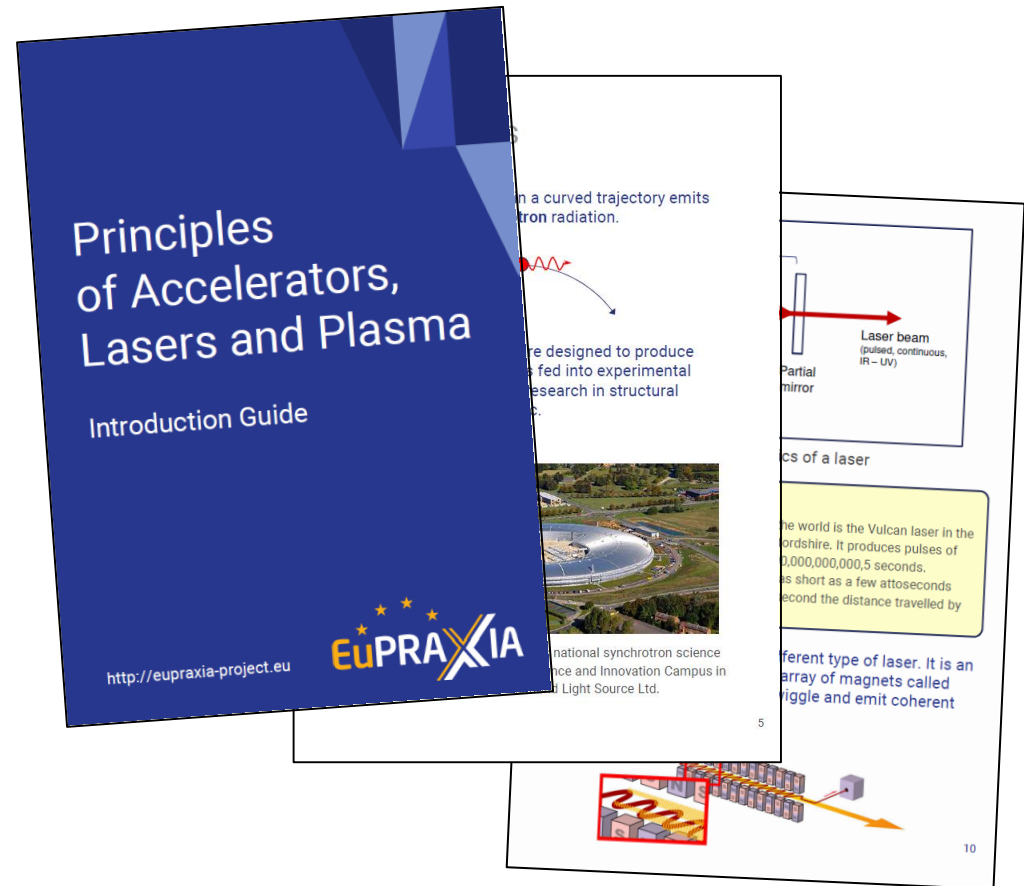
45 companies 18 exhibitors

1. Goodfellow Cambridge
2. SourceLAB
3. Genvolt
4. Exsel Dytecnica
5. D-Beam
6. Edwards
7. H. V. Wooding
8. Lasermet
9. Leybold UK
10. MDC Vacuum
11. Okazaki
12. Pfeiffer Vacuum
13. PSL Assemblies
14. Thorlabs
15. TMD Technologies
16. TUV SUD Nuclear Technologies
17. UHV Design
18. Springer



Hands-on demonstrations

- Waves
- Lasers and optics
- Magnets
- Electricity
- Accelerators

Principles of Accelerators, Lasers and Plasma
Introduction Guide

<http://eupraxia-project.eu>

in a curved trajectory emits synchrotron radiation.

are designed to produce... fed into experimental... research in structural...

Partial mirror

Laser beam (pulsed, continuous, IR - UV)

Properties of a laser

The world's largest laser is the Vulcan laser in the UK. It produces pulses of 0.000,000,000,5 seconds. This is short as a few attoseconds (10⁻¹⁸ second) the distance travelled by light in one attosecond.

A different type of laser. It is an array of magnets called wigglers and emit coherent radiation.

International synchrotron science... Centre and Innovation Campus in... Light Source Ltd.

Guide for schools

Go Surfin! | Instructions | The EuPRAXIA Project

**UNIVERSITY OF
LIVERPOOL**

Surfatron

Catch the wave of accelerators

Amplitude

cm

Wavelength

cm

Frequency

Hz

Injection velocity

cm/s

Phase velocity

25.00 cm/s

Injection velocity

10.00 cm/s

Velocity gain

0.00 cm/s

Release

(C) Ricardo Torres, University of Liverpool / Cockcroft Institute, 2018.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant No 653782. The information herein reflects only the views of its authors and the Research Executive Agency is not responsible for any use that may be made of the information contained.

Industry opportunities in accelerator facilities

Prof Peter McIntosh, ASTeC, STFC

Laser Technology in 2025

Dr Cristina Hernández Gómez, CLF, STFC



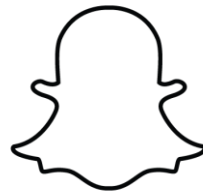
System integration in large scale research infrastructures

Dr Georg Korn, ELI Bemlines

Enabling technologies in laser plasma accelerators

Dr Paul Dumont, SourceLAB

- High media impact
- Talks streamed live and uploaded on YouTube
- Social media campaign



#EuPRAXIA

PLEASE SEND US YOUR STORIES!