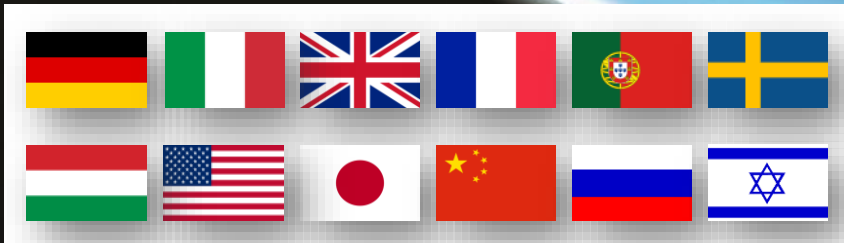


EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



Outreach and Liaison

Dr 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.

- Established in October 2016;
- Defines EuPRAXIA-wide communication activities, deadlines and target audiences;
- More than a dozen activities to communicate project goals and achievements;
- Establishes and promotes project identity.





- Up-to-date information about our project;
- Download area for all dissemination materials;
- Latest news from all project partners and information about past and upcoming events.

www.eupraxia-project.eu



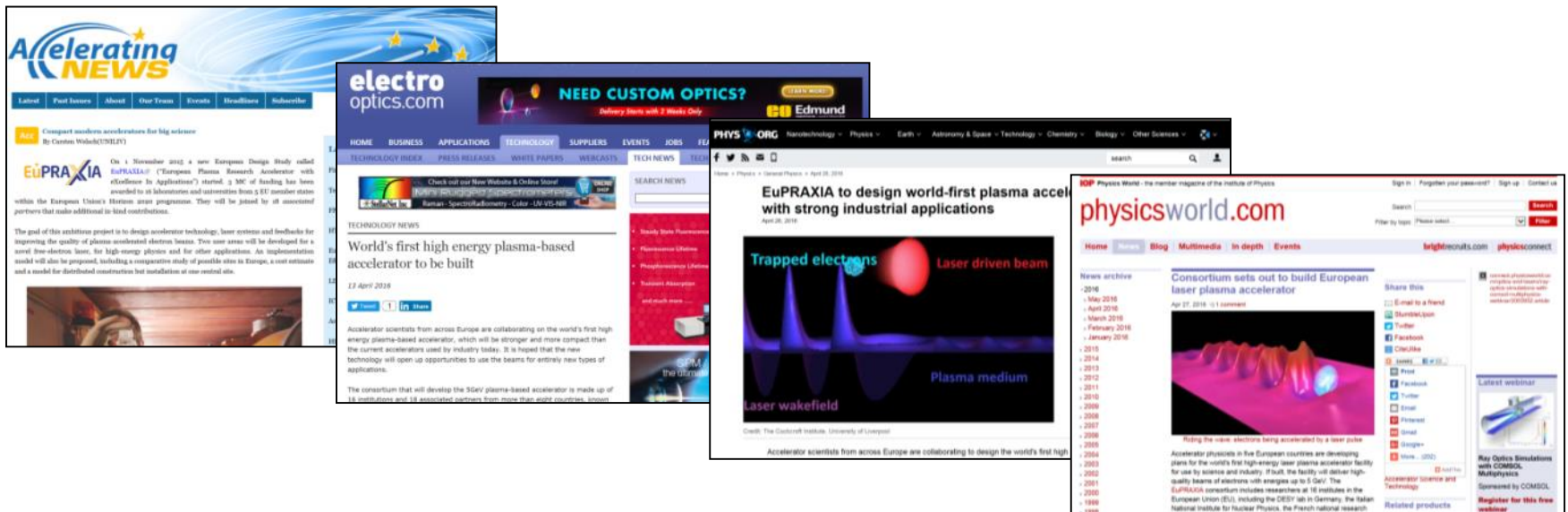
The Cockcroft Institute
The QUASAR Group

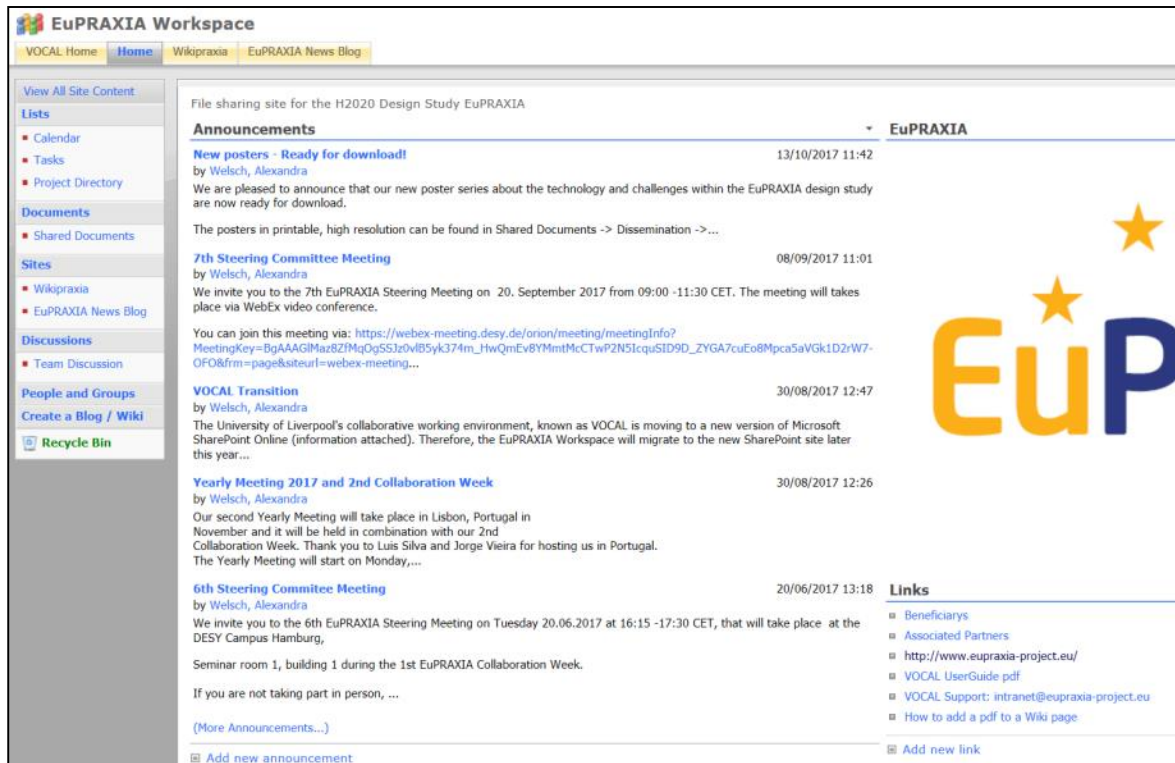


@ cockcroft_news
@ QUASAR_group

#EuPRAXIA #plasma #accelerator

- Regular news on project website and partner institutions (to date primarily DESY and University of Liverpool / Cockcroft Institute).
- More than 20 feature articles in magazines, newsletters, and news portals.





The screenshot shows the EuPRAXIA Workspace intranet. The main content area is titled "Announcements" and lists several recent updates:

- New posters - Ready for download!** (13/10/2017 11:42) by Welsch, Alexandra. Announcement about new poster series.
- 7th Steering Committee Meeting** (08/09/2017 11:01) by Welsch, Alexandra. Invitation to a meeting on 20 September 2017.
- VOCAL Transition** (30/08/2017 12:47) by Welsch, Alexandra. Announcement of the migration to a new SharePoint site.
- Yearly Meeting 2017 and 2nd Collaboration Week** (30/08/2017 12:26) by Welsch, Alexandra. Announcement of a meeting in Lisbon, Portugal.
- 6th Steering Committee Meeting** (20/06/2017 13:18) by Welsch, Alexandra. Invitation to a meeting on Tuesday 20.06.2017.

The left sidebar contains navigation menus for Lists, Documents, Sites, Discussions, and People and Groups. The right sidebar contains a "Links" section with various resources.

- Intranet platform to be migrated to Sharepoint
- **Please send us your Microsoft email address and account name asap**

UK

- University of Strathclyde
- Science & Technology Facilities Council (STFC)
- University of Manchester
- University of Liverpool
- Imperial College London
- University of Oxford

GERMANY

- DESY Stiftung Deutsches Elektronen-Synchrotron
- Universitat Hamburg

FRANCE

- Centre National de la Recherche Scientifique (CNRS)
- Commissariat a l'nergie atomique et aux nergies alternatives (CEA)
- Synchrotron SOLEIL

PORTUGAL

- Associao do Instituto Superior Tcnico para a Investigao e desenvolvimento (IST-ID)

ITALY

- Istituto Nazionale di Fisica Nucleare (INFN)
- Consiglio Nazionale delle Ricerche (CNR)
- Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA)
- Universita di Roma La Sapienza

ASSOCIATED PARTNERS

SWEDEN

- Lunds Universitet

GERMANY

- Helmholtz-Zentrum Dresden-Rossendorf (HZDR)
- Helmholtz-Institut Jena
- Ludwig-Maximilians-Universitat Mnchen

FRANCE

- Universit de Lille

HUNGARY

- Wigner Research Center for Physics

JAPAN

- Kansai Photon Science Institute
- Osaka University
- RIKEN Spring-8

CHINA

- Jiaotong University Shanghai
- Tsinghua University Beijing

INTERNATIONAL

- CERN
- ELI-Beamlines

USA

- Center for Accelerator Science and Education at Stony Brook University (CASE)
- Lawrence Berkeley National Laboratory (LBNL)
- University of California, Los Angeles (UCLA)

This site offers an overall briefing for media. It contains neither the report on a study nor the conclusions of the study. The information is for general information only. It is not intended to be used as a basis for any legal action. The European Commission is not responsible for any use that may be made of the information contained herein.

EUROPEAN PLASMA RESEARCH ACCELERATOR WITH EXCELLENCE IN APPLICATIONS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019718. The information in this document only reflects the views of its authors and the Research Executive Agency is not responsible for any use that may be made of the information contained herein.

- Establishing project presence at different venues;
- Used in collaboration meetings and conferences.



DESIGNING THE FUTURE

The EuPRAXIA Consortium is preparing a conceptual design for the world's first multi-GeV plasma-based accelerator with industrial beam quality and dedicated user areas.

INTERNATIONAL COLLABORATION

EuPRAXIA brings together a consortium of 18 laboratories and universities from 6 EU member states. The project, coordinated by DESY, is funded by the EU's Horizon 2020 programme. The consortium has been joined by 18 associated partners to make additional in-kind contributions. The consortium holds open international events to strengthen collaborations, to connect to interested users from FELs, high-energy physics, medicine and industry, and to assess the development of the project.

ADVANCED TECHNOLOGIES

The project is structured into 14 working groups dealing with simulations of high gradient laser plasma accelerator structures, design and optimization of positron and electron beams, research into alternative and hybrid techniques, Free Electron Lasers (FEL), high-energy physics, and radiation source applications.

EuPRAXIA joins novel acceleration schemes with modern lasers, the latest correction technologies and large-scale user areas. The consortium offers unique training opportunities for researchers in a multidisciplinary field.

OPENING NEW HORIZONS

The project will bridge the gap between successful proof-of-principle experiments and ground-breaking, ultra-compact accelerators. With a smaller size and improved efficiency, plasma-based technologies have the potential to revolutionize the world of particle accelerators multiplying their applications to medicine, industry and fundamental science.

The goal of this project is to produce a conceptual design for the world's first multi-GeV plasma-based accelerator that can provide industrial beam quality into dedicated user areas.

- Translated into six languages plus non-technical version;
- Distributed at events.



Project promotion and distribution of leaflets and brochures at the industrial exhibitions of:

- IPAC'16, Busan (South Korea)
- IBIC'16, Barcelona (Spain)
- IPAC'17, Copenhagen (Denmark)
- IBIC'17, Grand Rapids (USA)

EuPRAXIA QUANTUM LEAP TO A NEW GENERATION OF PARTICLE ACCELERATORS

The EuPRAXIA Consortium is preparing a conceptual design for the world's first multi-GeV plasma-based accelerator with industrial beam quality and dedicated user areas. EuPRAXIA brings together a consortium of 16 research institutions from 5 EU member states. The project, coordinated by DESY, is funded by the EU's Horizon 2020 programme. EuPRAXIA has been joined by 22 associated partners.

ASSOCIATED PARTNERS (October 2016)

- Shanghai Jiao Tong University, China
- Tsinghua University Beijing, China
- DE - German Light Infrastructure - Berlin/Bonn, International
- PL-IMP - Institute for Physics and Laser Physics at Wrocław University of Science and Technology, Poland
- Technische Universität Braunschweig, Germany
- Max-Planck-Gesellschaft, Deutscher Forschungsbereich, Germany
- Leibniz-Mikrotron-Zentrum Wuppertal, Germany
- Physikalisches Institut der Universität Würzburg, Germany
- CEM - European Organization for Nuclear Research, International
- Korea Research Institute of Technology (KRISS), Korea
- Chubu University, Japan
- RIKEN (Research Institute of Physics and Chemistry), Japan
- SLAC National Accelerator Laboratory, USA
- KAIST - Korea Advanced Institute of Science and Technology, South Korea
- SLAC - Lawrence Berkeley National Laboratory, USA
- UCLA - University of California Los Angeles, USA
- IFW - Leibniz Institute for Applied Materials Research, Germany
- Technische Universität München, Germany
- Technische Universität Darmstadt, Germany
- Institute of Applied Physics of the Russian Academy of Sciences, Russia
- Novosibirsk State University, Russia
- Maxwell Group, UK

- Based on brochure of key technologies;
- Available to download from the website;
- Displayed at partner institutions.

SOCIETAL IMPACT OF EuPRAXIA

There are currently more than 30,000 accelerators in operation around the world. Large accelerators are used in particle physics as colliders, or as synchrotron light sources for the study of condensed matter physics and structural biology, among other applications. Smaller particle accelerators are used in a wide variety of applications, including cancer therapy, production of radioisotopes for medical diagnostics, ion implanters for the electronics industry, cargo inspection, food sterilization, etc.

Laser-driven plasma accelerators offer a revolutionary path to more cost-effective accelerators

Key technologies:

- Ultrafast synchronization, electronics and correction loops
- Compact accelerator magnets with high field quality
- Stabilized petawatt laser technology
- Plasma cells
- Compact FELs
- Fast photon science detectors
- HEP detectors

Industrial innovation

Novel applications

Market opportunities

Knowledge transfer

EuPRAXIA

www.eu-praxia-project.eu



- Collection of abstracts of recently published papers in plasma acceleration;
- Quarterly;
- Distributed to all beneficiary and associate partners.

- Step up the publication of feature articles in the general media;
- Continue the promotion in conferences;
- Articles series about young researchers in EuPRAXIA;
- Educational videos;
- 2nd edition of brochure on key technologies;
- Outreach symposium in 2018.



QUANTUM LEAP TOWARDS THE
NEXT GENERATION OF ACCELERATORS

Liverpool Convention Centre – 6th July 2018

Up to 250 participants:

- Delegates EuPRAXIA collaboration week
- Industry
- Local schools, university students and general public
- Media
- Policy makers

Talks by key note speakers

Industry exhibition

Posters about WP results

Hands-on science and interaction

Celebration of the project

