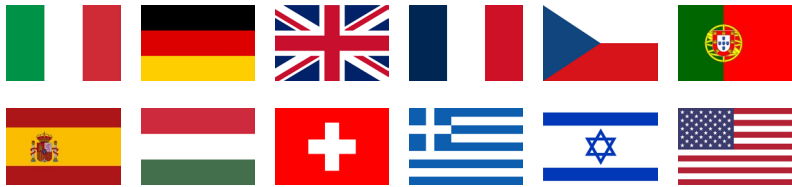


EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



WP2 – Dissemination & PR

Carsten P Welsch / University of Liverpool



This project has received funding from the European Union's Horizon
Europe research and innovation programme under grant agreement
No. 101079773

WP2 focuses on communication tasks coordinated by ULIV and INFN, supported by the collaborating institutes with their respective extensive experience, knowledge base and existing communication channels:

- Updates of dissemination, exploitation, and communication plan
- Development of links with industry
- Contributions to an efficient EuPRAXIA User Office
- Development of information material for identified target audiences and provision of the material to all project stakeholders

Important: Joined-up approach. Please let us know your communication contacts!

Aim: Connect and build our community. News from all of us are much more impactful – starting with the project launch.



Colour codes

Indigo

#2B3983

R 43

G 57

B 131

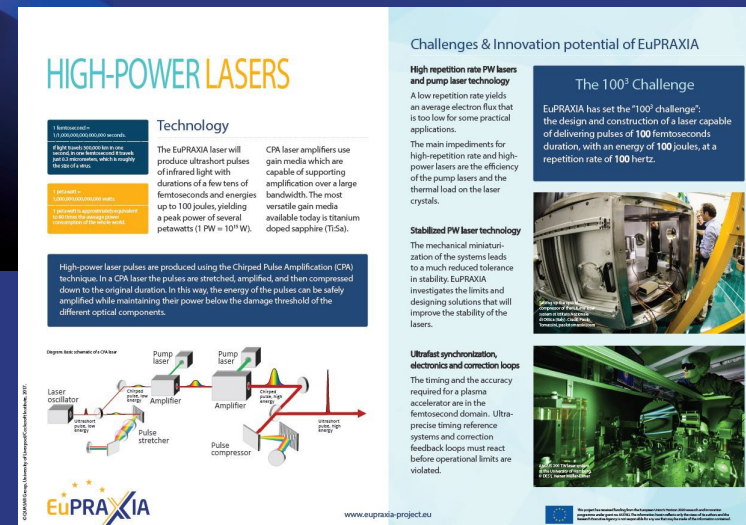
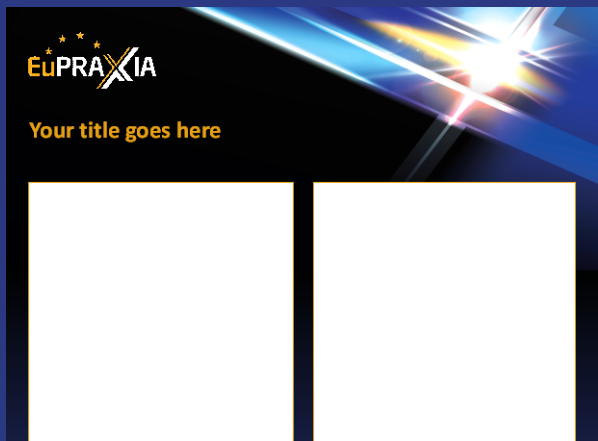
Gold

#FCAF17

R 252

G 175

B 23





Dr. Ralph Assmann
DESY

Workshop on an European Plasma Accelerator
June 29th – July 1st, INO-CNR/INFN, Pisa, Italy




3rd Collaboration Week

University of Liverpool
Central Teaching Hub (CTH)




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
- Universität Hansestadt Hamburg

FRANCE

- Centre National de la Recherche Scientifique (CNRS)
- Commissariat à l'énergie atomique et aux énergies alternatives (CEA)
- Synchrotron SOLEIL

PORTUGAL

- Associação do Instituto superior técnico para a investigação 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)
- Università di Roma La Sapienza

ASSOCIATED PARTNERS

SWEDEN

- Lunds Universitet

GERMANY

- Helmholtz-Zentrum Dresden-Rossendorf (HZDR)
- Helmholtz Institut Jena
- Ludwig-Maximilians-Universität München

FRANCE

- Université de Lille

HUNGARY

- Wigner Research Center for Physics

JAPAN

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

CHINA

- Jiatong 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 project has received funding from the European Union's Horizon 2020 research and innovation programme under grant No. 652782. 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.




EUROPEAN PLASMA RESEARCH ACCELERATOR WITH EXCELLENCE IN APPLICATIONS



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EuPRAXIA gold
and indigo tone
used throughout
website for
headings,
buttons, icons
etc



Prominent
EuPRAXIA logo

From our Grant Agreement:

Milestones:

M2.1 Project website update and maintenance plan established (M03)

M2.2 Update of dissemination, exploitation and communication plan (M06) and every 6-months thereafter

M2.3 Detailed plans and dates for EuPRAXIA industrial meetings (M12)

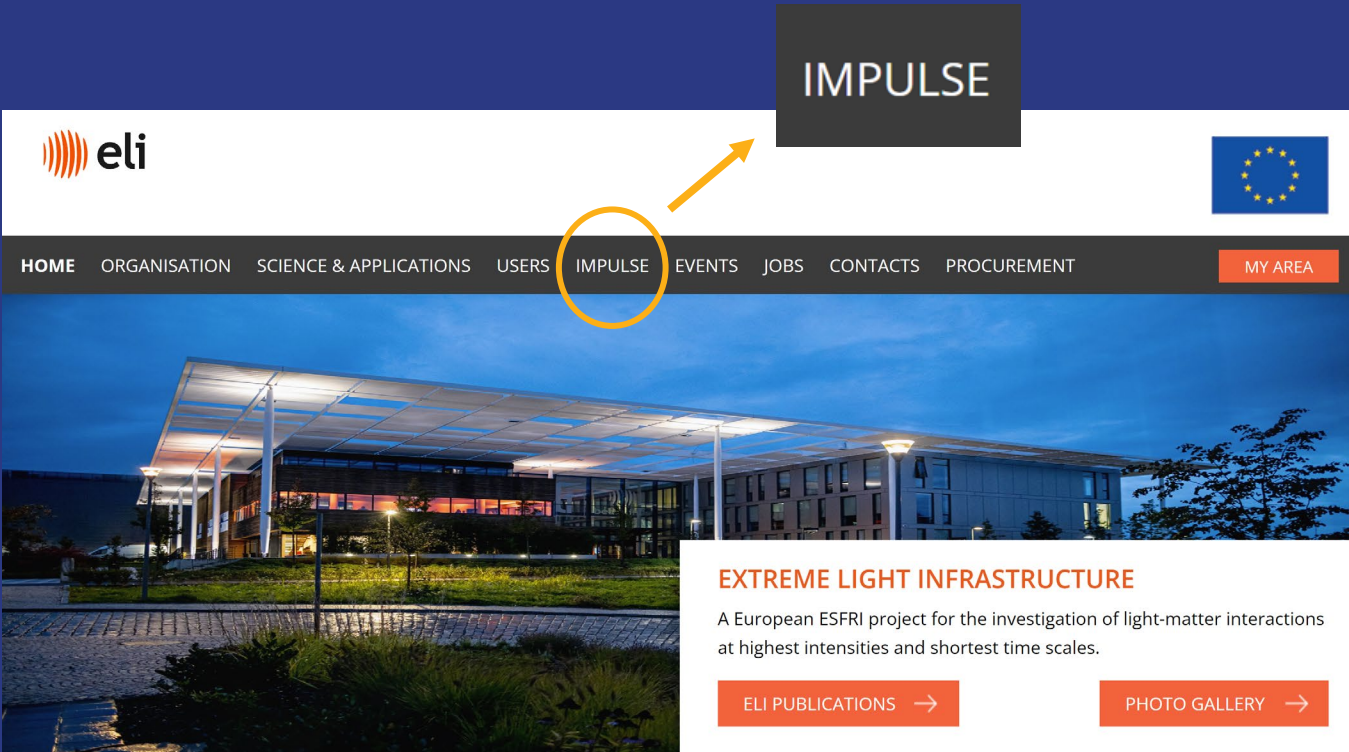
Deliverables (brief description and month of delivery)

DEL2.1 Web site (DEC) update published (M6)

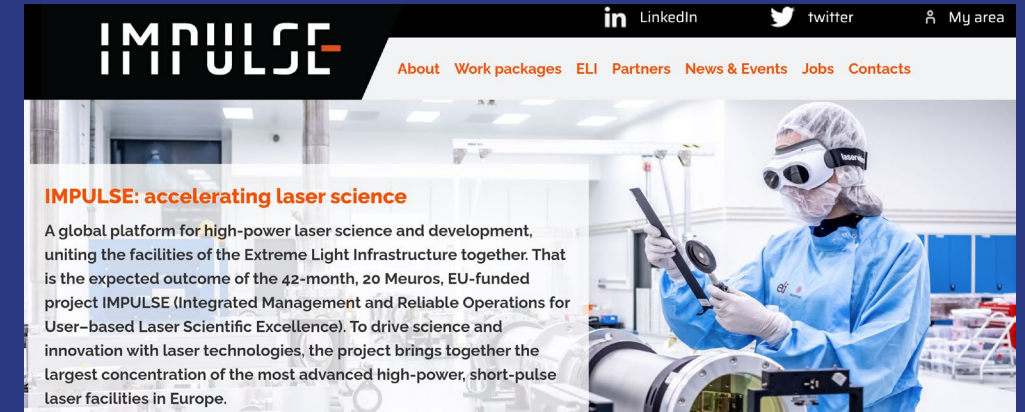
DEL2.2 EuPRAXIA Brochure (DEC) published and distributed (M12)

DEL2.3 EuPRAXIA Symposium and outreach (DEC) event and its web site (M24)

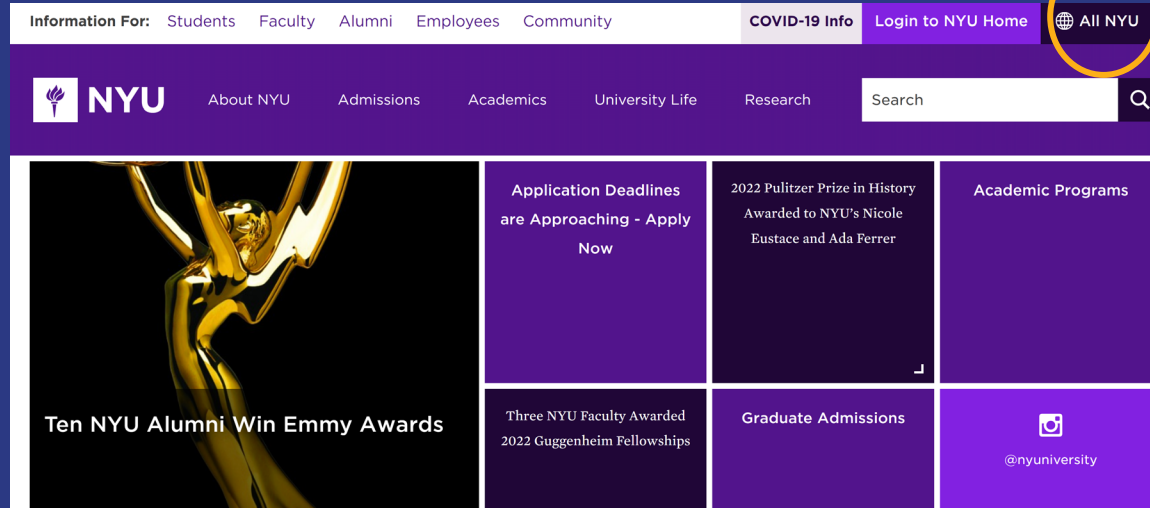
DEL2.4 EuPRAXIA Open Innovation Forum Kickstarter Event and 2nd Symposium (DEC) and its web site (M46)



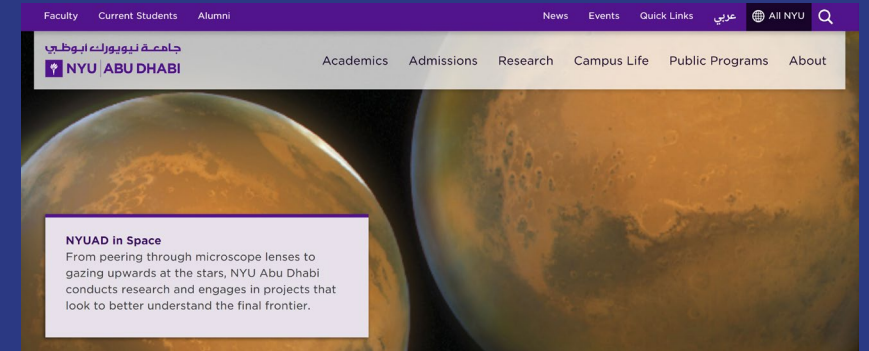
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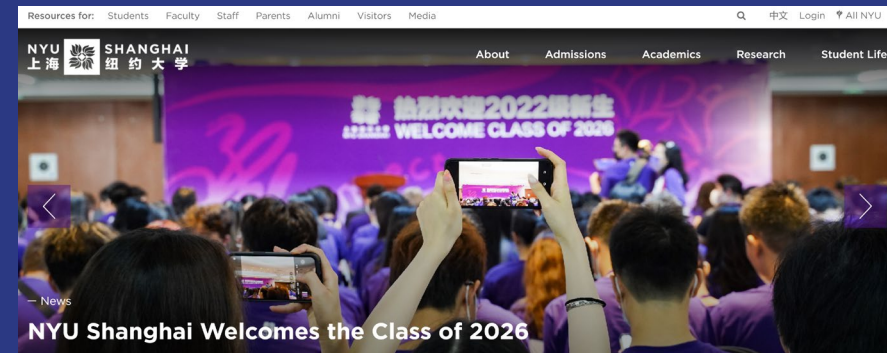
<https://impulse-project.eu/>



<https://www.nyu.edu/>




<https://nyuad.nyu.edu/en/>



<https://shanghai.nyu.edu/>


Home Projects Contacts



EUROPEAN PLASMA RESEARCH ACCELERATOR WITH EXCELLENCE IN APPLICATIONS

EuPRAXIA is the first European project that develops a dedicated particle accelerator research infrastructure based on novel plasma acceleration concepts and laser technology. EuPRAXIA is one of the projects on the European Strategy Forum on Research Infrastructures (ESFRI) Roadmap of 2021.

[Learn More](#)

EuPRAXIA – a distributed, compact and innovative accelerator facility based on plasma technology

The EuPRAXIA project aims at the construction of an innovative electron accelerator using laser- and electron-beam-driven plasma wakefield acceleration that offers a significant reduction in size and possible savings in cost over current state-of-the-art radiofrequency (RF)-based accelerators.

EuPRAXIA envisions a beam energy of 1 to 5 gigaelectronvolts (GeV) and a beam quality (single pulse) equivalent to present RF-based linacs. Its performance goals will enable versatile applications in various domains, e.g. as a compact free-electron laser (FEL), compact sources for medical imaging and positron generation, table-top test beams for particle detectors, as well as deeply penetrating X-ray and gamma-ray sources for material testing.



EuPRAXIA Preparatory Phase

EuPRAXIA Preparatory Phase will develop the organisational, legal, financial and technological aspects of the EuPRAXIA infrastructure.



EuPRAXIA Advanced Photon Sources

Short info about EuAPS



EuPRAXIA @SPARC_LAB

The EuPRAXIA@SPARC_LAB project, intended to put forward LNF as host of the EuPRAXIA European Facility.



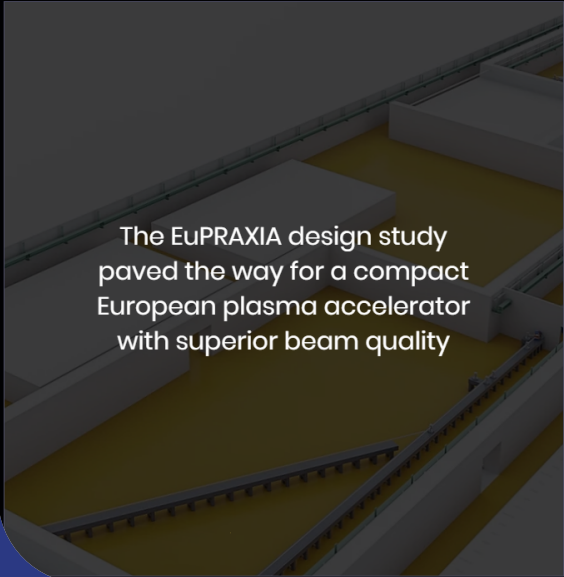
EuPRAXIA Doctoral Network

EuPRAXIA-DN offers exciting prospects for a cutting edge research, technology innovations and a unique training program for a cohort of 12 Fellows, based at EuPRAXIA partner organizations.

“

EuPRAXIA will address the demand for increased access to FEL facilities in Europe; offers unique features in time resolution, pump-probe capabilities, spatial resolution for X-ray imaging and penetration depth for material analysis; will be the first Research Infrastructure worldwide to realise an accelerator facility based on novel concepts so far have only been used in experimental tests; provides unique opportunities for education and training in innovative technologies in the European Research Area and beyond.

European Strategy Forum on Research Infrastructures , ESFRI



The EuPRAXIA design study paved the way for a compact European plasma accelerator with superior beam quality

The EuPRAXIA design study produced a Conceptual Design Report for the worldwide first high energy plasma-based accelerator that can provide industrial beam quality and user areas.

It is the important intermediate step between proof-of-principle experiments and ground-breaking, ultra-compact accelerators for science, industry, medicine or the energy frontier.

[Learn More](#)



Preparatory Phase

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[About](#)
[Organization](#)
[Work Packages](#)
[News](#)
[Contact](#)



TOWARDS REVOLUTIONARY APPLICATIONS AND BENEFITS FOR SOCIETY

-  Meeting the demand for accelerator-based research from a compact facility with ultra-short pulses, opening new potential for innovation.
-  Addressing the needs for more cost-efficient, reduced size, innovative and sustainable particle accelerator facilities.
-  Keeping European accelerator innovation world-leading and competitive in an international race towards the first compact accelerator facility.

DESIGNING THE FUTURE

FIRST COMPACT ACCELERATOR FACILITY

[LEARN MORE](#)

EuPRAXIA-PP is a project designed to develop the organizational, legal, financial and technological aspects of the EuPRAXIA infrastructure, following the recommendations of the European Strategy Forum on Research Infrastructures (ESFRI).

A REVOLUTIONARY PATH TO MORE COST-EFFECTIVE ACCELERATORS

EuPRAXIA

EuPRAXIA is the first European project that develops a dedicated particle accelerator research infrastructure based on novel plasma acceleration concepts and laser technology. It focuses on the development of electron accelerators and underlying technologies, their user communities, and the exploitation of existing accelerator infrastructures in Europe. It was accepted onto the ESFRI roadmap for strategically important research infrastructures in June 2021 as a European priority.

[LEARN MORE ABOUT EuPRAXIA](#)

The Education and Public Outreach Service (EPOS) of LNF fosters the scientific literacy through a wide program of initiatives addressed to students, teachers and general public to bridge science and society, either inside or outside the LNF site.

The main mission are to engage the public with science, to inform about the latest issues in research conducted by INFN-LNF and the collaborations, to raise awareness, curiosity and passion towards science and its applications and building network with the society.



Students
programme



Teachers
programme



General public

edu.lnf.infn.it

EXAMPLE

Activities that involve EuPRAXIA Primary and middle school students



Students
programme

Guided Tours to the Bruno Touschek Visitor Centre and LNF main experimental sites

Type of activity: informal education, out-of-school learning, guided tours, hands-on experiments

Discussed topics: INFN research activities, general and modern physics and its applications

Number of requests: almost 500 participants

INFN Kids summer camp, July

Type of activity: lectures, hands-on activities

Discussed topics: general and modern physics, research and technology and their applications

Number of expected participants: 30 students

EXAMPLE

Activities that involve EuPRAXIA High School students



Students
programme

International Day of Girls and Women in Science, 10 February 2023

Type of activity: frontal and dialogic lecture, round table

Topics: the role of girls and women in science, how to create an inclusive environment, how to overcome stereotypes

Number of expected participants: 200 students

INSPYRE – International School on modern Physics and Research, 27-31 March

Type of activity: lectures, hands-on activities, guided tours

Discussed topics: modern physics, research and technology and their applications

Number of expected participants: 120 students (foreign + Italian)

INFN LNF Summer School, June

Type of activity: lectures, hands-on activities, guided tours

Discussed topics: modern physics, research and technology and their applications

Number of expected participants: 60 students

Guided Tours to the Bruno Touschek Visitor Centre and LNF main experimental sites

Type of activity: informal education, out-of-school learning

Discussed topics: INFN research activities, modern physics and its applications

Number of requests: almost 3000 participants



Activities that involve EuPRAXIA University students



Students
programme

Excellence course addressed to Bachelor's students, Accelerators Physics

Type of activity: lectures, guided tours, hands-on experiments

Dates: July (9 hours)

Excellence course addressed to Masters' students, Accelerator Technology

Type of activity: lectures, guided tours, demonstrative experiments

Dates: July (9 hours)

Guided Tours to the Bruno Touschek Visitor Centre and LNF main experimental sites

Type of activity: informal education, out-of-school learning

Discussed topics: INFN research activities, modern physics and its applications

Number of expected participants: 600 students

EXAMPLE

Activities that involve EuPRAXIA Teachers' program



Teachers
programme

High School Teachers

Title: Incontri di Fisica/Physics Meetings

Type of activity: training and refresher course aimed to promote and support learning/teaching of modern Physics, frontal lectures, hands-on experiments (see experimental activity: Plasma accelerators)

Dates: November 16-18, 2022

Number of participants: 192

EXAMPLE

Activities that involve EuPRAXIA

Pomeriggi di scienza/Science afternoons

Type of activity: webinars broadcasted on INFN LNF YouTube channel, seminars held in person dedicated to the latest issues in Physics and Science

Dates: December 2022 – June 2023

OpenLabs, INFN LNF open day

Type of activity: guided tours, public lectures, exhibitions, laboratory-based activities, scientific demonstrations and a very rich program for kids.

Date: May 2023

Number of expected participants: 2500

European Researchers' Night – scieNcE Together project

Type of activity: informal education, lifelong learning, exhibition

Dates: September

The activity took place at: Città dell'Altra Economia, Roma

Number of expected participants: 6000

Guided Tours to the Bruno Touschek Visitor Centre

Type of activity: informal education, lifelong learning

Discussed topics: INFN research activities, modern physics and its applications



General public



Exciting plans

- Templates for all communication: please use these to establish and promote the EuPRAXIA brand;
- Joined-up communication with material provided to partners on a very regular basis;
- Science symposia and outreach events to create wider impact;
- Education materials such as *Surfatron* online game, demonstrators and teaching material;
- Structured engagement with policy makers and industry.

We look forward to working with you!



EuPRAXIA