EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



WP5 – User Strategy & Services

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WP5 – About us





Emiliano Principi

Senior Scientist @ FERMI

EIS-TIMEX beamline coordinator

Pump-probe time-resolved spectroscopies



Francesco Stellato

Associate Professor @ Tor Vergata

Development & application
of Synchrotrons & Free Electron Lasers
techniques to the study of biological systems



WP5 – Involved Institutions



- University of Rome Tor Vergata
- Elettra Sincrotrone Trieste
- Eidgenössische Materialprüfungs- und Forschungsanstalt (EMPA)
- Queen's University Belfast



WP5 - User Strategy & Services



EuPRAXIA will be a Research Infrastructure (RI) providing **intense photon pulses** exploiting plasma wakefield acceleration, with a beam energy of 1 to 5 GeV, a beam quality equivalent to present radiofrequency linear accelerators and benefits in terms of size and cost.

In this context, **WP5** will define the users-related strategies



WP5 - Goals



Define the Demand Analysis

Who are the **users** of EuPRAXIA and **what** are their needs

- Define a comprehensive list of services to users
 What services will be provided to users
- Define the access policy
 Different schemes under which users can access the EuPRAXIA research infrastructure
 Competitive and/or non-competitive access, selection criteria, procedures





- Market study of similar RI models
 - → Building up from best practice in other RIs

Analysing, in at least 8 research facilities open to users in fields relevant for scientific communities similar to EuPRAXIA, who are the users of those facilities and what services are offered to users in those facilities.

- EuPRAXIA potential users base and their needs
 - → Meetings and workshops aimed at gathering potential users and recording their needs will be organized

This market study should focus on the user profiles, what services are provided there, and how those users actually access those facilities (competitive or non-competitive access, collaborative access, short and long term projects, selection criteria, panels, user committees)





- Update services offered at EuPRAXIA-RI

 ME 1. Uses and resulted study in aludio at RI personal results at the services and accomplished at the services a
 - M5.1. User and market study including RI potential user base and needs (M12)
- Update the EuPRAXIA-RI Access policy

M5.2 EuPRAXIA report on access policy (M30)

- Develop the "Terms of service" document
 - Standard contract based upon which users will be authorised to access the research infrastructure,
 - Conditions of access
 - Safety rules & procedures
 - Ownership of results & data policies (dissemination, data storage, etc.)
 - M5.3 Service Catalog & Organizational requirements for user services (M42)





- Coordination with technical WPs
 - → Users' needs, services offered to users and access policies are tightly connected to the RI features
- Tailoring the offered services according to the possibly different features of the two EuPRAXIA sites



WP5 - Deliverables



Report on EuPRAXIA-RI demand analysis

Analysis of the potential user community requests in terms of operation parameters, scientific, experimental and data handling support, practical and economical assistance.

Effective strategies to fulfill these needs.

Report on EuPRAXIA-RI terms of services

Defines the rules establishing rights and duties of the EuPRAXIA-RI users.

Definitions of data policy, publication rules for both academical and industrial users and will contain the criteria defining the access policy to the RI.





Building up a users' community

Users's needs and policies depend on who the users are and which kind of

experiments is planned

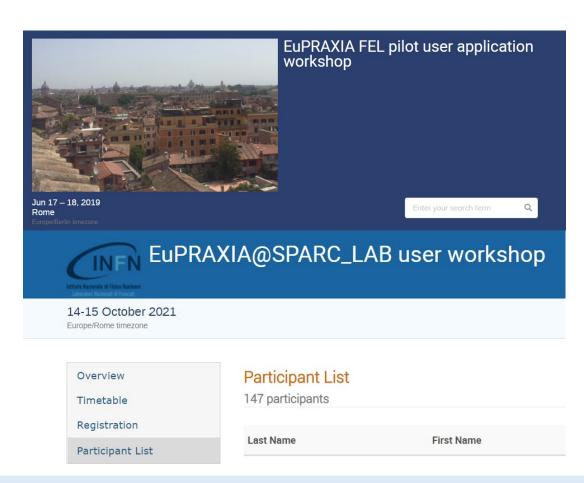
EuPRAXIA FEL pilot user application workshop > 50 registrants, 2019

First EuPRAXIA@SPARC_LAB user workshop

> 140 registrants, 2021

9 countries

> 30 institutions https://agenda.infn.it/event/27926/overview







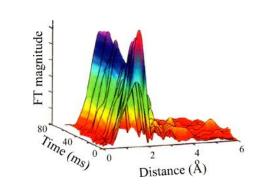
 A scientific case for one of the two EuPRAXIA sites has already been assembled Imaging & Spectroscopy exploiting a water window (3 nm) FEL

Coherent imaging (advanced methods)

X-ray spectroscopy

Raman spectroscopy

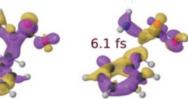
Photo-fragmentation of molecules







Proteins





WP5 – Connections with other WPs



- WP2 (Dissemination & PR)
- WP3 (Organisation and rules)
- WP7 (E-needs and data policies)
- WP11 (Applications)
- WP13 (Diagnostics)
- WP15, WP16 (TDRs)