EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS

EuPRAXIA

LNF and EuPRAXIA

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Welcome to LNF

- It is with great pleasure that I give to all of you my warmest welcome to the Laboratori Nazionali di Frascati of INFN
- This is a very important day for our laboratory. We are here to discuss about a project that we believe represents the future of LNF for many years to come
- It is particularly amazing that we are doing this together with so many colleagues and friends from many different countries and institutions

Accelerators at LNF

- The Frascati National Laboratory of INFN since its foundation in 1954 has been mainly devoted to the design, construction and operation of particle accelerators
- At present we have two running machines. The e^+e^- collider at c.m. energy of 1020 MeV, DAΦNE, devoted to experimental particle and nuclear physics. The SPARC_LAB complex, devoted to studies on new radiation sources and, most notably, to plasma acceleration experiments
- As of today there are ~ 310 employees and ~ 40 PhD or PostDocs, about half of which are working on our accelerators

Accelerators at LNF

EuPRAXIA at LNF

Funded by the European Union

- Since a few years the laboratory has firmly taken the road to what we believe will be our future: EuPRAXIA
  - ➢We are preparing to host efficiently the EuPRAXIA headquarter
  - ➢We have have obtained important financial resources from the Italian government. **108** M€ for the construction of the LNF pillar, **22** M€ for the construction of the betatron source in the framework of the NextGenEu program (EuAPS project)
  - ➢We have finalized the project of the building for the local pillar, and are starting the bureaucratic procedures to obtain the permission to build
  - ➢We have started an intense program of R&D in various areas of interest for the construction of the machine

EuPRAXIA@SPARC_LAB

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EuPRAXIA@SPARC_LAB R&D workshops

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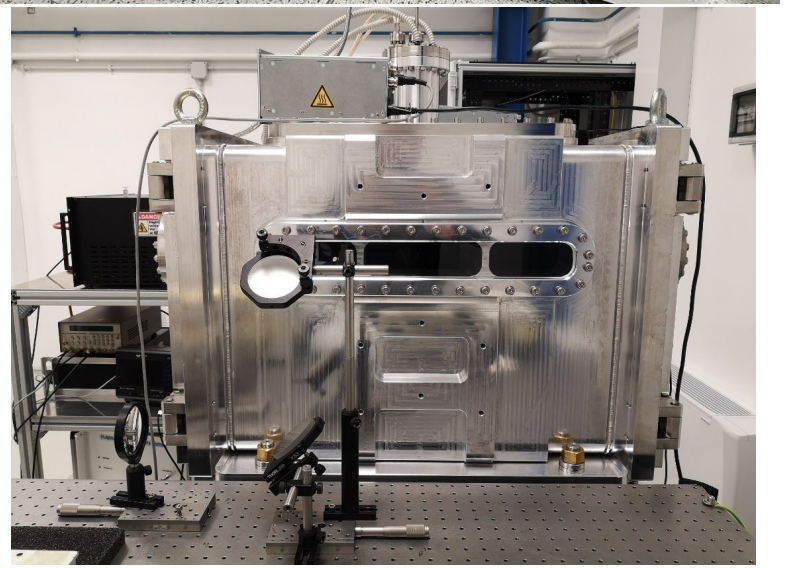
Vacuum Lab

X-band RF test facility



Plasma Lab

EuPRAXIA@SPARC_LAB external contributions

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- It is our firm commitment that in house work will ensure that the LNF pillar will be released and maintained
- However **external help is of extraordinary importance**. There is a large number of topics that can be subject of external collaboration with Institutions all around Europe
- This includes contributions in the design of the machine, as well as in the procurement of its hardware components
- Agreements can bilateral, common 3rd party funding projects or EU projects
- We are eager to see the outcome of the proposals from the preparatory phase projects on this