

## The EuPRAXIA@SPARC\_LAB project and related R&D activities at LNF.

*Tuesday, 8 June 2021 11:20 (20 minutes)*

A new Research Infrastructure named “EuPRAXIA@SPARC\_LAB” has been recently funded by the Italian Minister of Research and INFN. In its final configuration it will equip LNF with a multi-disciplinary user-facility, based on a soft X-ray Free Electron Laser (FEL) driven by a ~1 GeV compact electron accelerator. This fundamental goal will be achieved by using a high gradient X-band RF linac to excite plasma waves in the plasma accelerator module.

This activity is performed in synergy with the H2020 European Design Study “EuPRAXIA” that has delivered the Conceptual Design Report at the end of 2019 and it is now developing towards the implementation of an international user facility.

In this talk we report about the recent progresses on the going scientific and technical advancement for EuPRAXIA@SPARC\_LAB and on the recent experimental results obtained at the LNF test facility SPARC\_LAB.

**Primary author:** FERRARIO, Massimo (INFN-LNF)

**Presenter:** FERRARIO, Massimo (INFN-LNF)

**Session Classification:** Session