INFN LASA – MS17

**Short Description of the Facility**

LASA is characterized by the presence of four test facilities devoted to:

* Superconducting (SC) Magnets
* Superconducting (SC) RF Cavities
* High Brightness Photocathodes for Electron Sources
* Laser Applications to High Power Fabry Perot Cavities and Advanced Timing Systems.

The two facilities dedicated to SC magnets and RF cavities will allow experimental characterization and test of prototype or full-size magnets and RF cavities (starting from 650 MHz) in a cryogenic environment.

The facility devoted to high brightness photocathodes for electron sources provides a suitable environment to characterize the performances of photocathode materials measuring different optical and physical properties.

A modern high power, high repetition rate laser is the heart of the facility dedicated to laser applications to high power Fabry Perot Cavities and advanced timing systems. It will allow the study and development of this devices with a well-equipped laboratory

**Status of the Facility**

The four LASA facility are ready to accept users from external institutions. All the four facilities are operative and in use.

We may have the first users within 1 month. All the safety device procurements and safety procedures are underway, and this time is the one required to complete these actions.

Service improvements may be carried out in the meantime we proceed with the first experimental activities.

Expected Users

The facilities above described are of interest for many research activities both in Europe and all around the world.

The typical users may be researchers that will improve their knowledge on basic physics after taking their University Degree of to refine their thesis during a PhD.

Advanced senior researchers may propose advanced research programs taking advantage both of the peculiar instrumentation available and of the experience of the people dedicated at each facility.

To promote the availability of these facilities we are preparing a dedicated leaflet and a video to show all the opportunities.