



Contribution ID: 134

Type: **Poster**

The Beam Test Facility of the “Laboratori Nazionali di Frascati”

The Beam Test Facility (BTF) of the National Laboratories of Frascati provides external users with positron/electron primary and secondary beams in various configurations for detector calibration purposes.

The BTF beam is organized into bunches, with a repetition rate of up to 49 pulses per second from the DAΦNE LINAC facility. Each bunch offers impressive flexibility, accommodating a multiplicity ranging from a minimum of 1 to 10^{10} particles per bunch (depending on the specific hall and line). For secondary beams, energy selection spans a wide range, from 30 MeV up to maximum energies of 750 MeV (for electrons) and 510 MeV (for positrons).

A notable strength of BTF lies in its user-friendly approach. The beam can easily be manipulated in various beam parameters to meet users' specific needs, even during ongoing data collection. The facility comprises two experimental halls: BTFEH1 and BTFEH2. Both experimental halls feature remotely controlled movable tables, beam diagnostics, and essential services to facilitate experiments. These services include data delivery of machine and detector parameters, laser alignment, networking support, high voltage assistance, and provisions for compressed air, fluids, and gas pipelines.

Work-package

WP3 - RIs for Accelerator R&D

Facility identifier

INFN Frascati Beam Test Facility (BTF)

Author: DI OCIAIUTI, Eleonora (INFN e Laboratori Nazionali di Frascati (IT))

Co-authors: DI GIULIO, Claudio; Dr DI GIOVENALE, Domenico (INFN-LNF); Dr CARDELLI, Fabio; Mr FOGGETTA, Luca Gennaro (INFN); BUONOMO, bruno (INFN-LNF)

Session Classification: Cocktail - Poster session