

LNS Activities on Applied Physics

LNS - User Committee_2022

S. Tudisco

I-LUCE facility

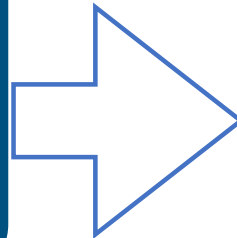


I-LUCE: INFN Laser Induced particle acCeleration

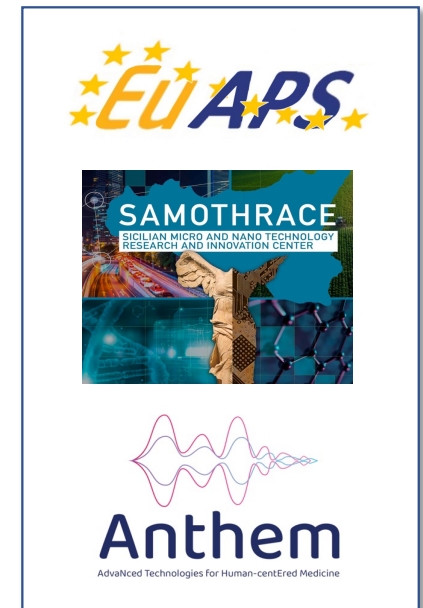


- BCT will fund a 45TW laser system;
- EuAPS, SAMOTHRACE and Anthem will fund the upgrade to 500TW, services and infrastructures
- aim: e- and proton acceleration to obtain “FLASH” regime and biological irradiation
- INFN will take care of the whole infrastructure and beams facility

First phase
1TW, 25fs, 30mJ, 10Hz
and
45TW, <25fs, >1J, 5Hz
Upgradable to 300TW



Second phase
500TW, <25fs, >1J, 5Hz
to
1PW, <25fs, 10J, 1Hz



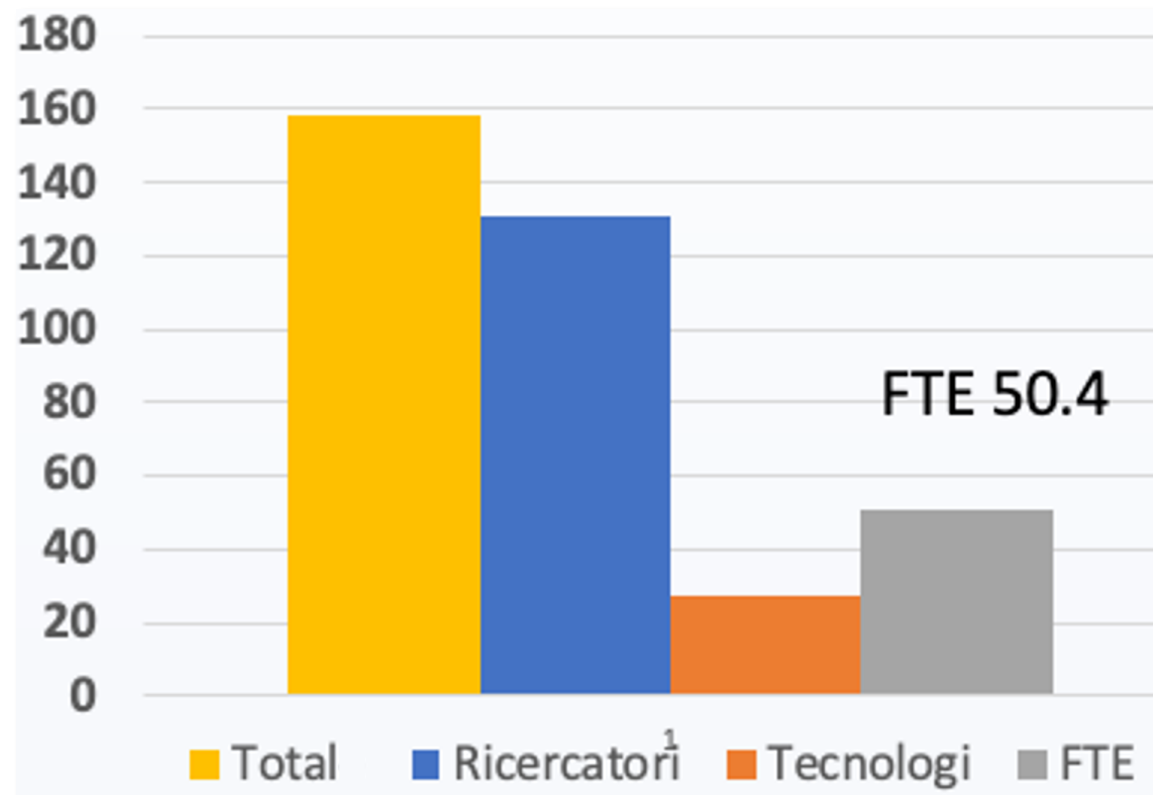
CSN5 Activities 2022



INFN Projects

- ANEMONE
 - DIODE
 - MEDIPIX4
 - HASPIDE (Call)
 - MICRON
 - FRIDA (Call)
 - HSMDIS
 - IONS
 - MC-INFN
 - MICROBE_IT
 - NEXT_AIM
 - NGSА (Call)
- Detectors
- Accelerators
- Ions sources
- Medical Phys.
- GW

GRV Total Budget 2022: 208,5 k€



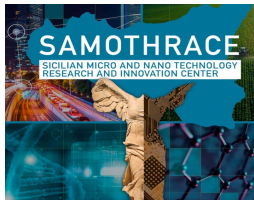
PNRR- Activities

LNS budget



EuPRAXIA Advanced Photon Sources

9.0 M€



INFN-Spoke5 - MADE4IS

Micro-Accelerator and Detectors for Innovation and Sustainability

4.5 M€



Advanced Technologies for Human-centered Medicine.

1.0 M€



Italian Integrated Environmental Research Infrastructures System

2.2 M€



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NextGenerationEU



Ministero
dell'Università
e della Ricerca

