

THE SAR-GRAV LABORATORY

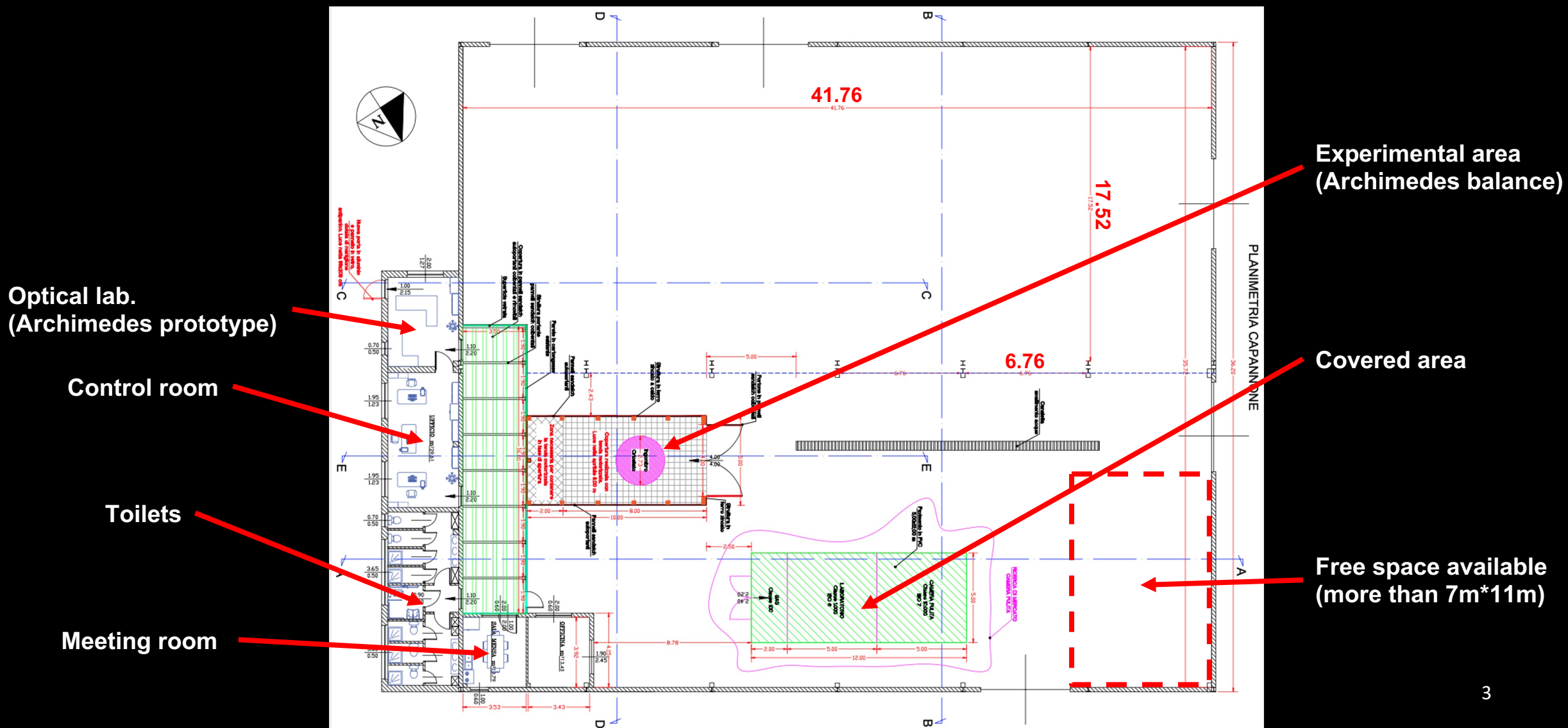
Bhetsa meeting - Pisa 11/11/2022



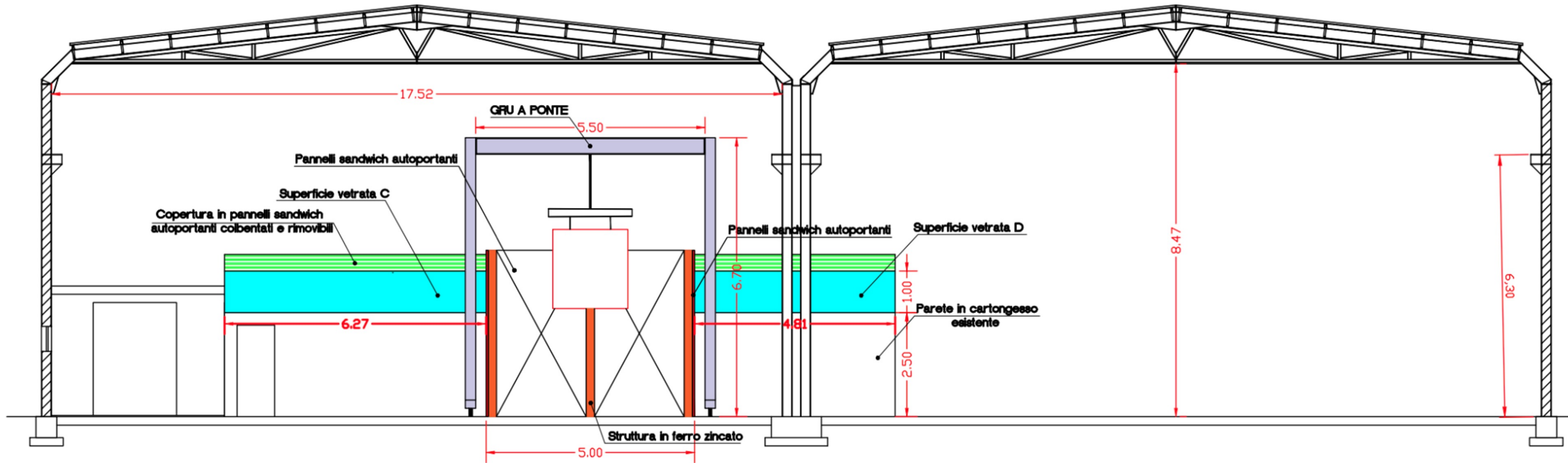
What is present:

- SarGrav area
- SarGrav control room
- Optical Laboratory with Archimedes prototype
- Archimedes balance

SarGrav area

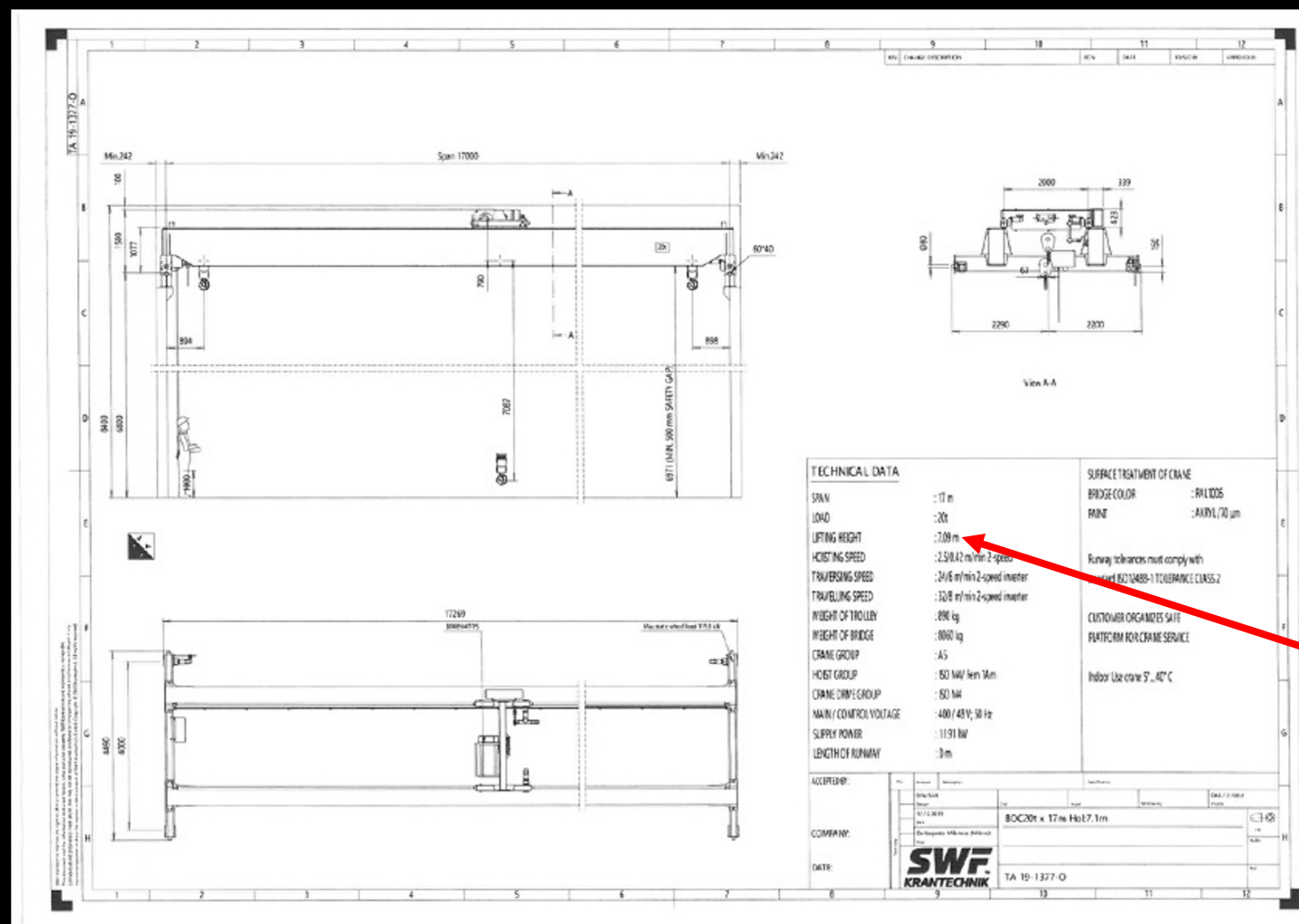


SarGrav area



SEZIONE-PROSPETTO D-D

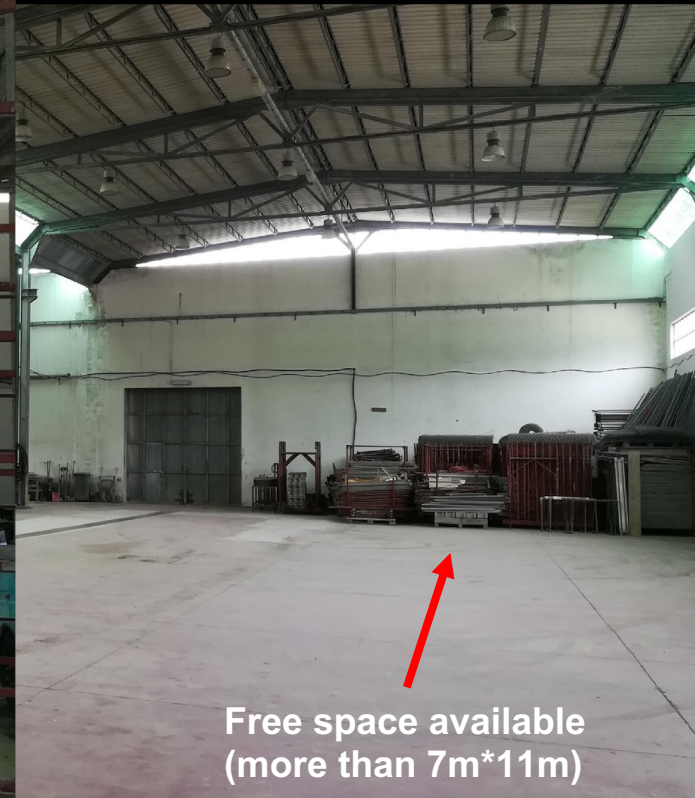
20t Crane



- New Quotation from companies on going
- 2022 cost estimation 150k

Lifting height: 7 m

SarGrav area



Free space available
(more than 7m*11m)

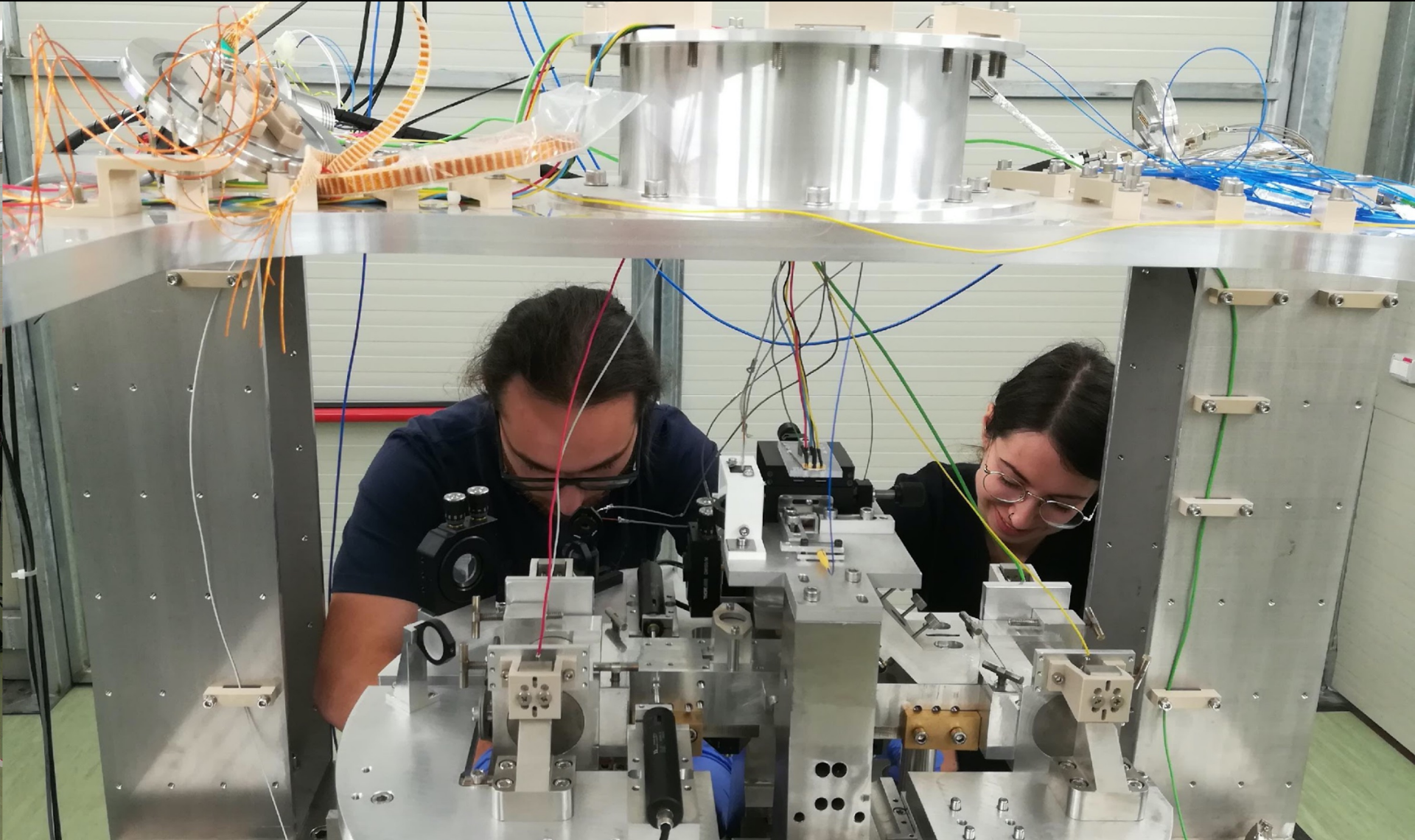
SarGrav control room



SarGrav optical lab. (Archimedes prototype)



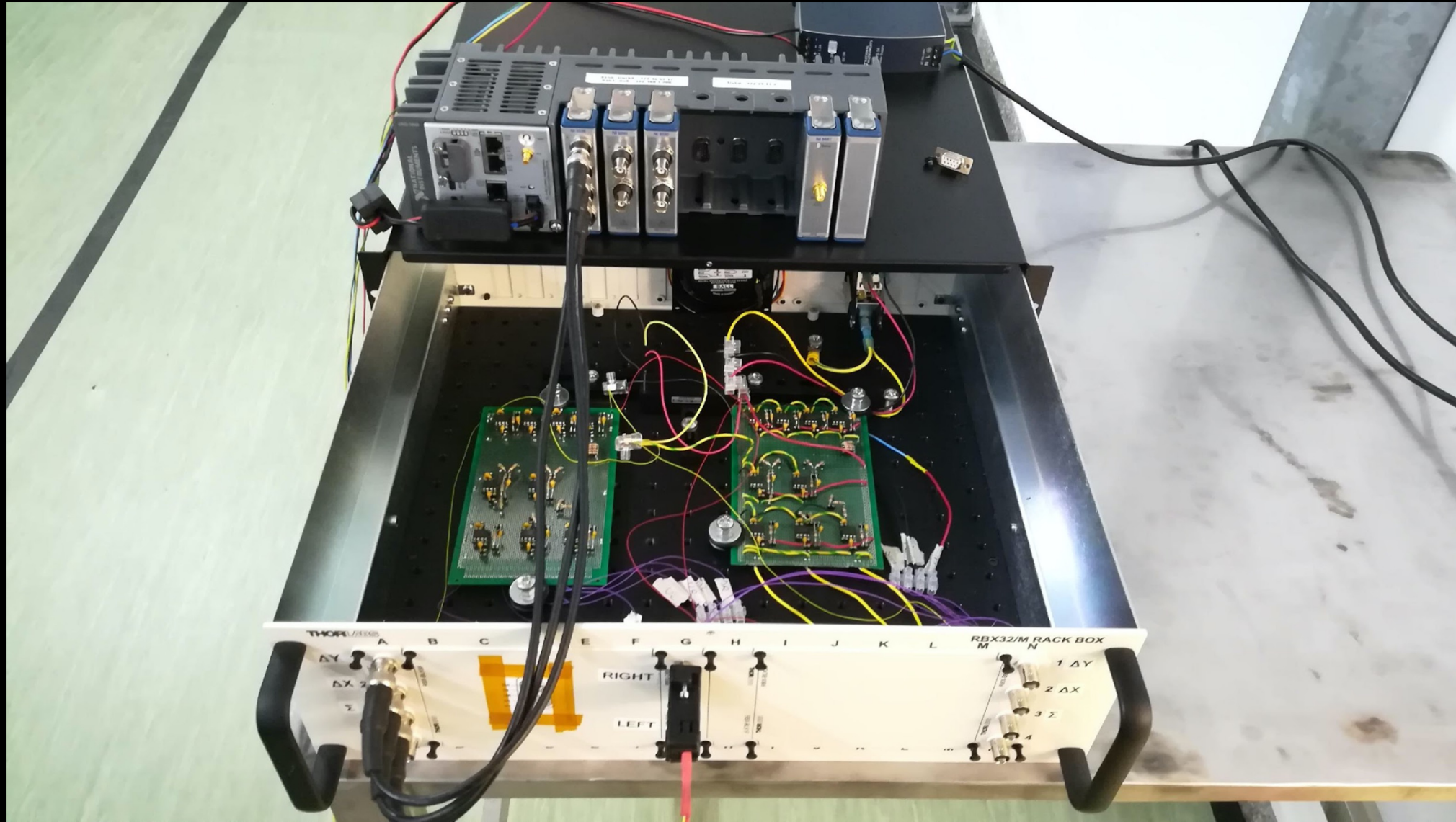
SarGrav experimental area (Archimedes exp.)



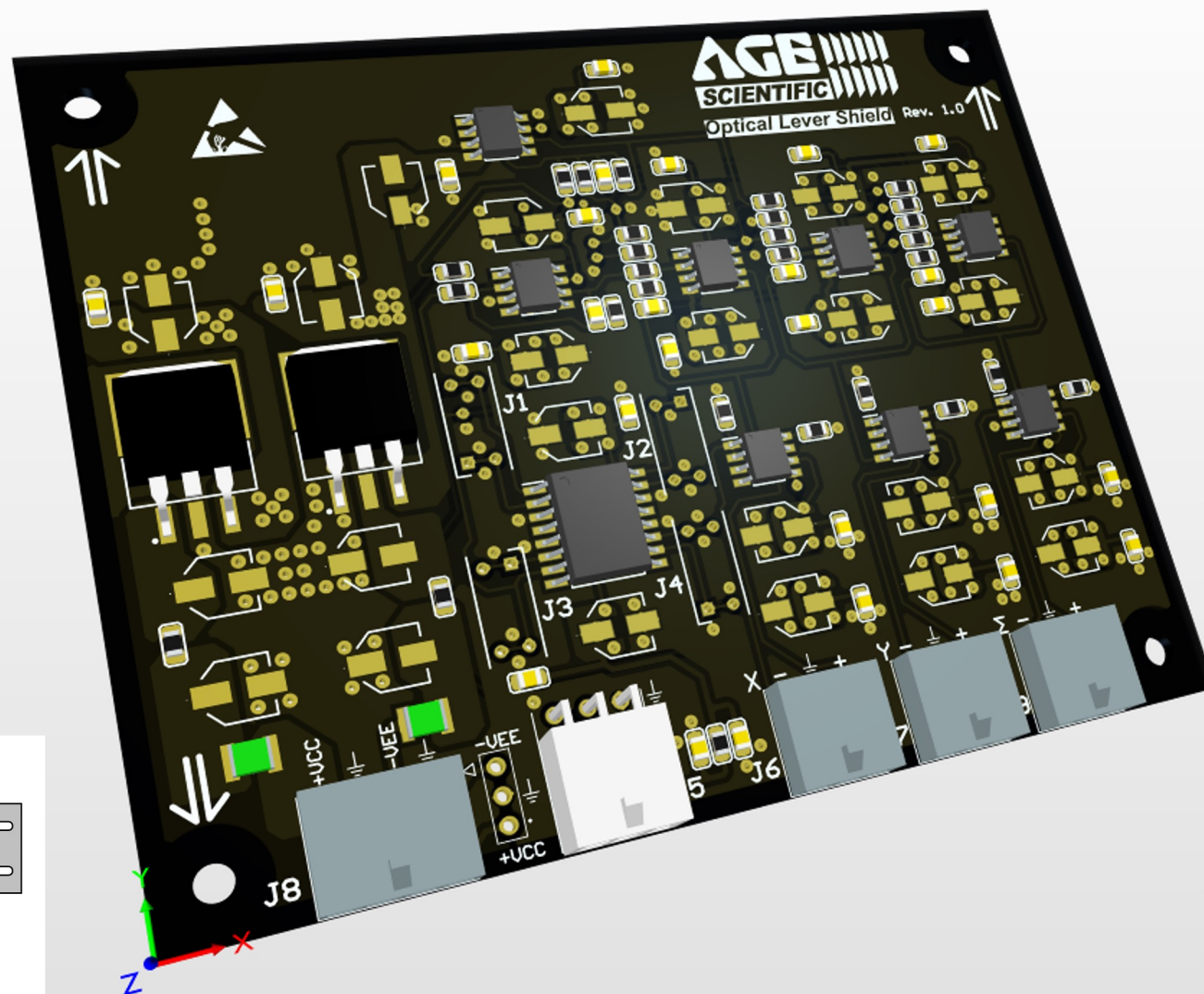
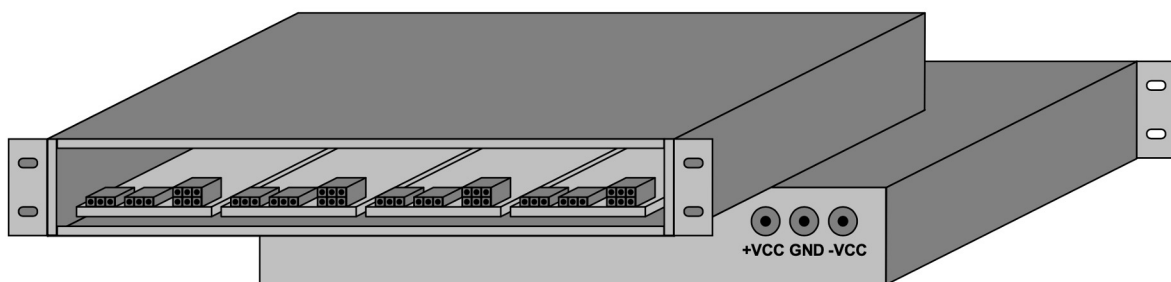
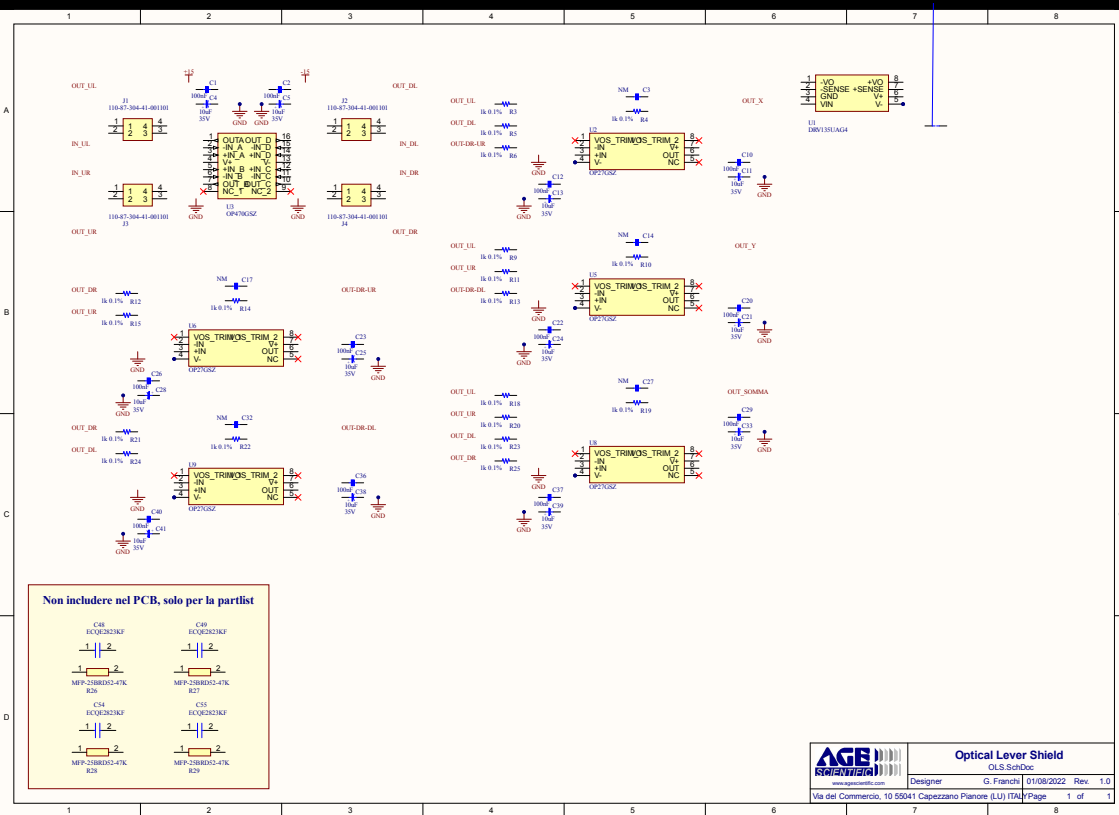
SarGrav experimental area (Archimedes exp.)



Optical Lever Shield (UNISS)



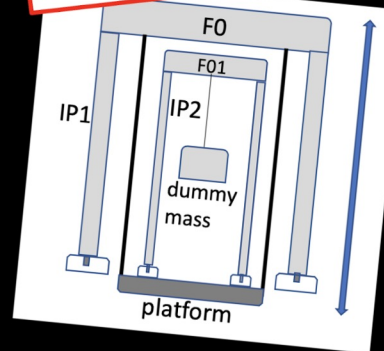
Optical Lever Shield (NGSA-UNISS)



Conferences:

ICNFP-2022: The Sardinian site candidate to host the Einstein Telescope

See: L. Trozzo talk



ET - suspensions

Sar-Grav may host ET technology prototypes
to test them in the ET expected noise conditions.

- L. Naticchioni et al., *Characterization of the Sos Enattos site for the Einstein Telescope*, JPCS 1468, 2020, <https://doi.org/10.1088/1742-6596/1468/1/012242>
- M. Di Giovanni et al., *A seismological study of the Sos Enattos Area – the Sardinia Candidate Site for the Einstein Telescope*, SRL, 2020, <https://doi.org/10.1785/0220200186>
- A. Allocca et al., *Seismic glitchness at Sos Enattos site: impact on intermediate black hole binaries detection efficiency*, EPJP, 2021, <https://doi.org/10.1140/epjp/s13360-021-01450-8>
- Others in preparation...

Davide Rozza – ICNFP 2022

Outreach activities

- European Researcher Night
- Outreach event for high school students in theatre, schools, pubs, restaurants, cultural sites...
- Interviews from local radio and newspapers
- Outreach made in: Alghero, Dorgali, Lula, Nuoro, Olbia, Ozieri, Sassari, Tempio-Pausania...

