



**More efficient work schedule and production**

Wide range of expertise allows to better project design, shortening production and testing times, as well as reducing the number and/or severity of failures.

Risk: Individual responsibility increase and individual failures could block the system!! **However, low risk low profit!!**

# Main “tasks” of 2023

- DL+MW
- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"><li>• DL</li><li>– BrainPET</li><li>– Hades</li><li>– Sealed RPC</li><li>– Dosimetry</li><li>– ImprovePT</li><li>– Cloud Chambers</li><li>– SparkChambers</li><li>– All other internal requests</li><li>– Significant number of external requests</li></ul> | <pre>graph LR; subgraph DL; D1[BrainPET]; D2[Hades]; D3[Sealed RPC]; D4[Dosimetry]; D5[ImprovePT]; D6[Cloud Chambers]; D7[SparkChambers]; D8[All other internal requests]; D9[Significant number of external requests]; end; subgraph MW; M1[BrainPET]; M2[Cloud Chambers]; M3[ProtoDune]; M4[Dosimetry]; M5[SND Mechanics]; M6[All other internal requests]; M7[Significant number of external requests]; M8[CERN Workshop]; end; D1 &lt;--&gt; M1; D4 &lt;--&gt; M4; D8 &lt;--&gt; M6; D9 &lt;--&gt; M8;</pre> | <ul style="list-style-type: none"><li>• MW</li><li>– BrainPET</li><li>– Cloud Chambers</li><li>– ProtoDune</li><li>– Dosimetry</li><li>– SND Mechanics</li><li>– All other internal requests</li><li>– Significant number of external requests</li><li>– CERN Workshop</li></ul> |
|---|--|--|

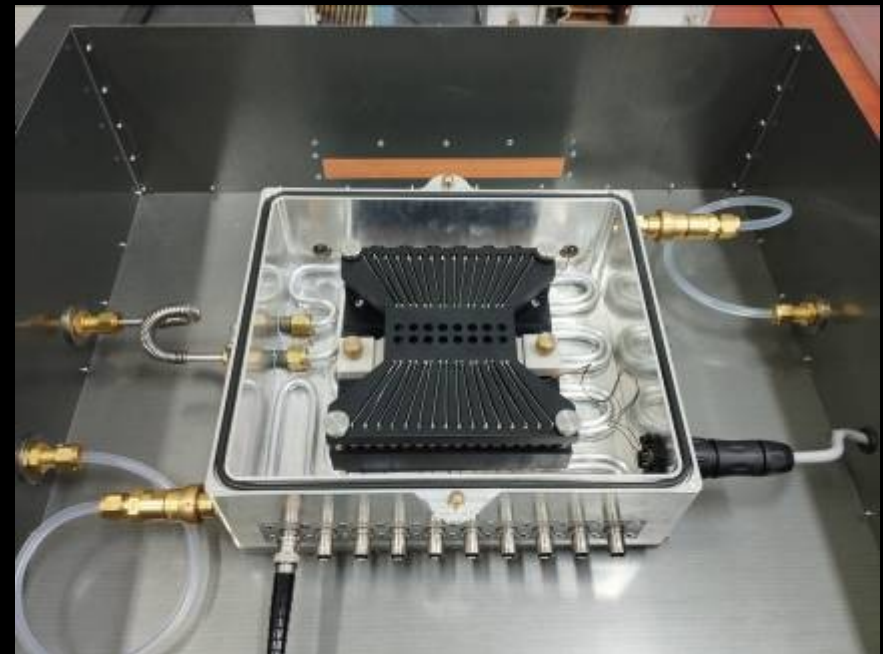
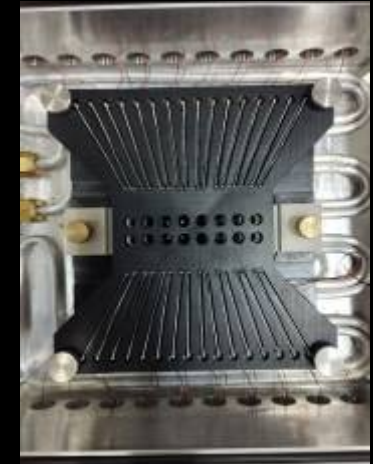
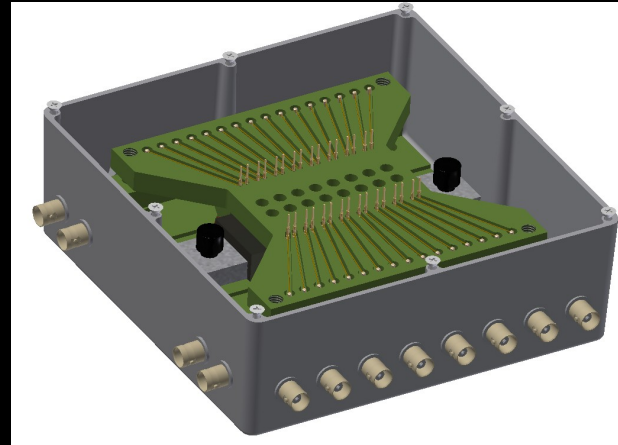
Exponential increase of the contribution of external demands with a total profit of more than 40 k€

All requests delivery on time. Capability to satisfy short term requests.

## External Work – Bioelectronics & Bioenergy Research Lab - UC

- Upgrade e maintenance of considerable instruments and tools
- R&D, design and production of new instruments
- Start close collaboration with very important opportunities

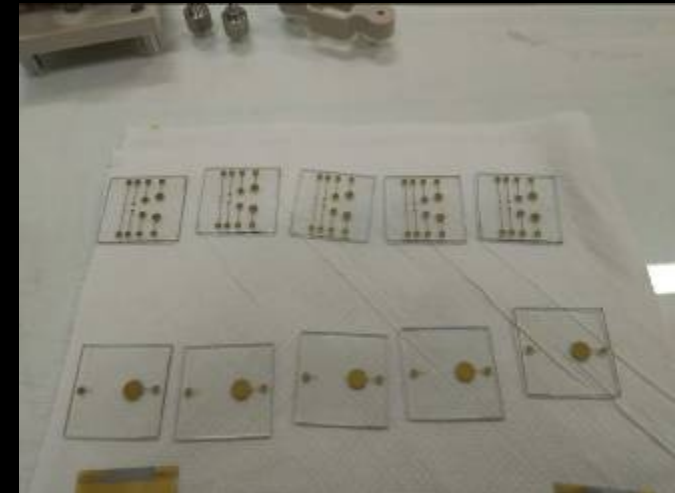
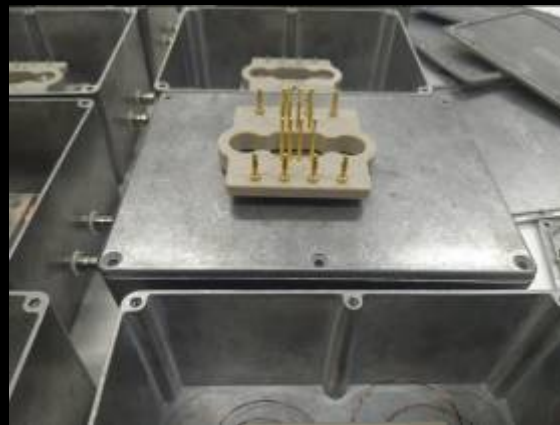
## Mini incubator with control ambient



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## Instrumentation for classes



## RPC-sealed Chambers

- 1 m<sup>2</sup> active area
- 30x30 cm<sup>2</sup> square 4 planes telescope



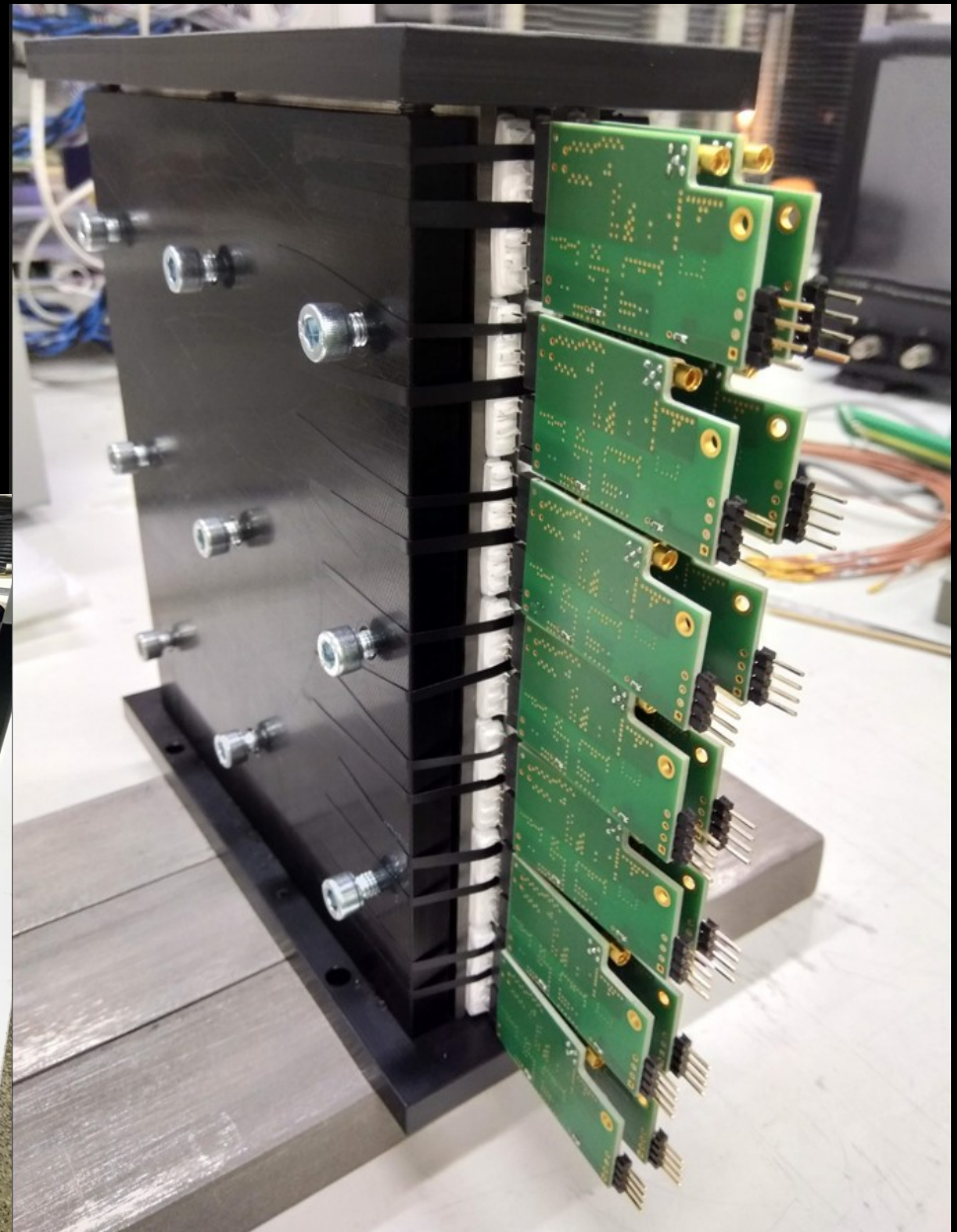
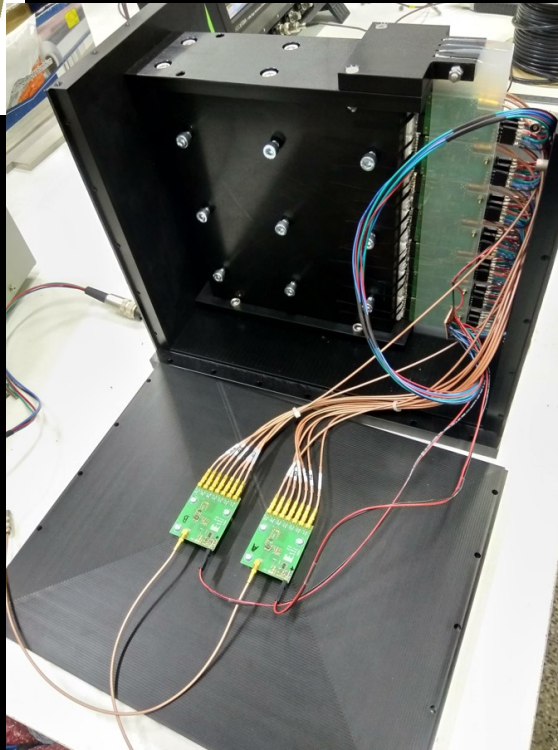
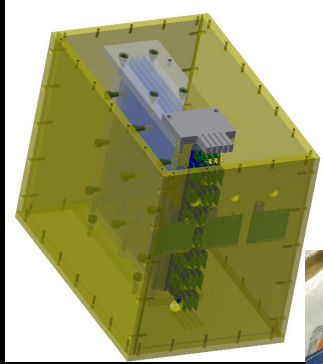
### RD51

- Design Xenon Condenser
- Design and production of Cryostat
- Small parts production



## Proton therapy

- R&D, design, production and test.
- Front-end electronics
- Optical coupling SiPM/scintillator



## Miscellaneous

- Spark chambers
- Phantom for radiobiology
- Mirror silver thermal evaporation and system recovery

