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The setting up of the TARDIS-Lab at IFIC for high-granular calorimetry R&D

Tuesday 21 October 2025 19:40 (1 hour)

Over the past five years, our team of the AITANA group has been working on bringing a new expertise and research lines to IFIC, bringing fresh expertise on detector instrumentation in an area never explored by IFIC (high-granular silicon calorimetry) but key in the future detector instrumentation of lepton colliders and other experiments as the LUXE. This has positioned IFIC as a leading institute in silicon sensors for calorimetry R&D oriented to experiments with lepton beams globally. A standout feature of our advancement is our new clean room—a.k.a.TARDIS-Lab —compliant with ISO7 standards. It provides a highly clean environment (compatible with ISO5 standards for small particle content) for characterizing, testing, and hybridizing silicon sensors with innovative silver-based epoxy solutions. The meticulousness of our work is crucial as we prepare to unveil groundbreaking technologies for future lepton colliders and other experiments.

Figure 1: enter image description here

*TARDIS Lab because it is bigger on the inside.

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