



Contribution ID: 403

Type: **Parallel**

Quantum sensor R&D for particle physics: the DRD5 collaboration

Wednesday 9 July 2025 08:30 (17 minutes)

In the context of the ECFA detector roadmap, several collaborations have been formed with a view towards carrying out the necessary detector R&D for future particle physics experiments. Among these, the DRD5 collaboration focuses on R&D on quantum sensors and related topics, specifically working along five technological axes (Quantum systems in traps and beams; Low-dimensional quantum materials; Superconducting quantum devices; Macroscopic scaled-up quantum systems; Quantum techniques for sensing) and one overarching capacity-developing axis. This presentation will give an overview with examples of the range of DRD5's activities and goals and will highlight its relevance to both low and high energy particle physics.

Secondary track

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Session Classification: T15

Track Classification: T15 - Quantum technologies in HEP (special topic 2025)