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# **Bachelor/Master Thesis**

At the Radiation Detectors Group (RDG) of IMB-CNM(CSIC

# Development of a FAIR Data Repository and Implementation of FAIR Data Principles

## Description

The importance of accessible, interoperable, and reusable research data is increasingly recognized across scientific domains. To address this need, we propose the development of a FAIR (Findable, Accessible, Interoperable, Reusable) data repository and the implementation of FAIR data principles within our research group. The FAIR principles provide guidelines for enhancing the usability and impact of research data, thereby fostering collaboration, innovation, and scientific advancement.

### **Objectives:**

**Development of a FAIR Data Repository**: Establish a centralized repository infrastructure capable of storing, managing, and disseminating research data in accordance with FAIR principles. The repository will serve as a secure and sustainable platform to deposit, and access datasets across diverse disciplines.

**Implementation of FAIR Data Principles:** Integrate FAIR data principles into the research data lifecycle, from data collection and curation to sharing and reuse. This involves adopting standardized metadata schemas, data formats, and access protocols to enhance the findability, accessibility, interoperability, and reusability of research data.

#### **Background and skills**

- Systems engineer, electronic engineer, physicist, or similar.
- Knowledge of programming languages such as Python, C++, Java, and familiarity with repositories and data bases.

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