



CHIARA  
FAILLA



## PI3SO: A SPECTROSCOPIC $\gamma$ -RAY SCANNER TABLE FOR SORT AND SEGREGATE RADWASTE ANALYSIS.

The current scenario of radioactive waste management requires innovative and automated solutions to ensure effectiveness and safety. In response to this need, the PI3SO (Proximity Imaging System for Sort and Segregate Operations) project was proposed. It is a gamma radiation proximity scanner system for radioactive waste with the primary goal of speeding up some aspects of the waste management cycle while reducing direct human operations. The system will provide proximity imaging for hot spot finding and spectral analysis for radiological characterization, enabling semiautomatic recognition, sorting and separation of radioactive waste. The core of the proposed scanning system consists of an array of 128 CsI(Tl) scintillators, 1 cm<sup>3</sup> size, coupled with silicon photomultipliers (SiPM), installed on a motorized bridge sliding along a suitable table in order to scan the materials under investigation.

**ESPRESSO SEMINARS**  
4 SETTEMBRE 2024 | ORE 15:00  
AULA AZZURRA - LNS

