



BULLKID-DMAnalysis Meeting

Giorgio Del Castello on behalf of the collaboration INFN - Roma 1

05/11/2025



Analysis meeting organization

- Biweekly alternating the simulations meeting in the same timeslot (wednesdays from 4 pm)
- New analysis techniques and results
- Results on newly taken data and status of the detector operation
- Task assignment to volunteers and active analysts

Pending Analysis Tasks

- Multidimensional OF applied to demonstrator data (Matteo Cappelli)
- Development of online monitoring system (Leonardo Pesce)
- File size optimization (Davide Quaranta)
- Improvement on LED calibration procedure (Gabriele Terrana, in collaboration with NUCLEUS)
- Study of LEE singles in demonstrator data (LNGS)
- Veto studies and characterization (Tommaso Lari)
- Processed file readout optimization (not assigned)
- Reduction of computational cost of OF trigger for KIT electronics (not assigned)
- Migration to CNAF (from 2026)

Upcoming data taken in Roma1

- Characterization of AlTiAl 3" BULLKID for better threshold
- Few campaigns of characterization of KIDs with funnels
- First performance evaluation of 100mm detector
- Operation of the demonstrator in the new Proteox Cryostat
- Characterization of new demonstrator wafer candidates

Active Analysts and how to join analysis efforts

- Giorgio (60%)
- Daniele (from december)
- Matteo C. (80%)
- Matteo F. (80%)
- Davide (30%)
- Leonardo (focused on funneling devices)
- Tommaso (focused on veto activities)
- Camilla (being onboarded now)
- LNGS?

TO JOIN ANALYSIS EFFORTS

- Required INFN account (sufficient to start working)
- For external people with respect to Roma1: we need to request a guest account status to access the computing farm for better performances

LIST OF ALL NEW PEOPLE JOINING!

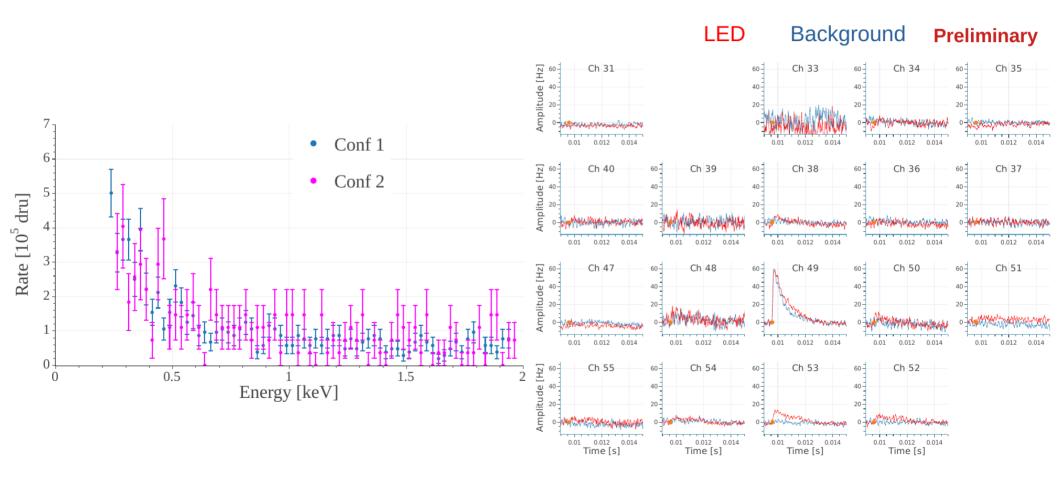






Backup Slides

Singles in BULLKID



Lighter weight OF