

DRDT 7.4: EXTREME ENVIRONMENT AND LONGEVITY

IMPLEMENTING DRD7:

AN R&D COLLABORATION ON ELECTRONICS AND ON-DETECTOR PROCESSING

Giulio Borghello, Oscar Augusto De Aguiar Francisco, Manuel Dionisio Da Rocha Rolo

- **RADIATION HARDNESS** [8:30 → 9:00] (Giulio Borghello)
 - introduction [8:30 → 8:35]
 - **TID and Challenges at Ultra-High Doses in Modern CMOS Technologies**(Stefano Bonaldo) [8:35 → 8:55]
 - discussion [8:55 → 9:00]
- **COOLING** [9:00 → 9:30] (Oscar Augusto De Aguiar Francisco)
 - introduction [9:00 → 9:05]
 - **on-detector cooling systems based on low-mass carbon dioxide evaporators** (Desiree Hellenschmidt) [9:05 → 9:25]
 - discussion [9:25 → 9:30]
- **CRYOGENIC TEMPERATURES** [9:30 → 10:00] (Manuel Dionisio Da Rocha Rolo)
 - introduction [9:30 → 9:35]
 - **cryogenic CMOS – Potential beyond quantum** (Patrick Vliex) [9:35 → 9:55]
 - discussion [9:55 → 10:00]