

DRD4-WG2 : Particle identification

WG2 meeting

Preamble

➤ Main goals of this WG:

- Develop advanced PID techniques.
- Discussions of common issues related to PID among different experiments.
- Validate the usage of novel photon detectors that are being developed in DRD4 for PID.

➤ Some of the common challenges for different PID techniques:

- Optimal optical design
- Need to detect single photons with high precision.
- Development and usage of new radiators. This includes the usage of eco-friendly gases
- Issues related to mechanical integration
- Efficient operation of new detectors
- Making use of fast timing

➤ Selection of a PID technique depends on many factors

- *Examples : Momentum range, available space and budget, photon detector technology*

Plans

- We would like to encourage discussions on topics related to detector design and development.
- Some of these may eventually give rise to the creation of projects in a 'Work Package'.
- This may also facilitate to find solutions to common problems encountered in different projects.

- **Today:**
 - We start with two presentations
 - At the end of the meeting, discussion on other potential topics of interest for this WG
 - Afterwards, take steps to follow up on the items discussed.

- **Next meeting :**
 - In mid-June, during the DRD4 collaboration week.
 - Please let me know, if you wish to give a presentation or bring up a topic for discussion, in that meeting.