

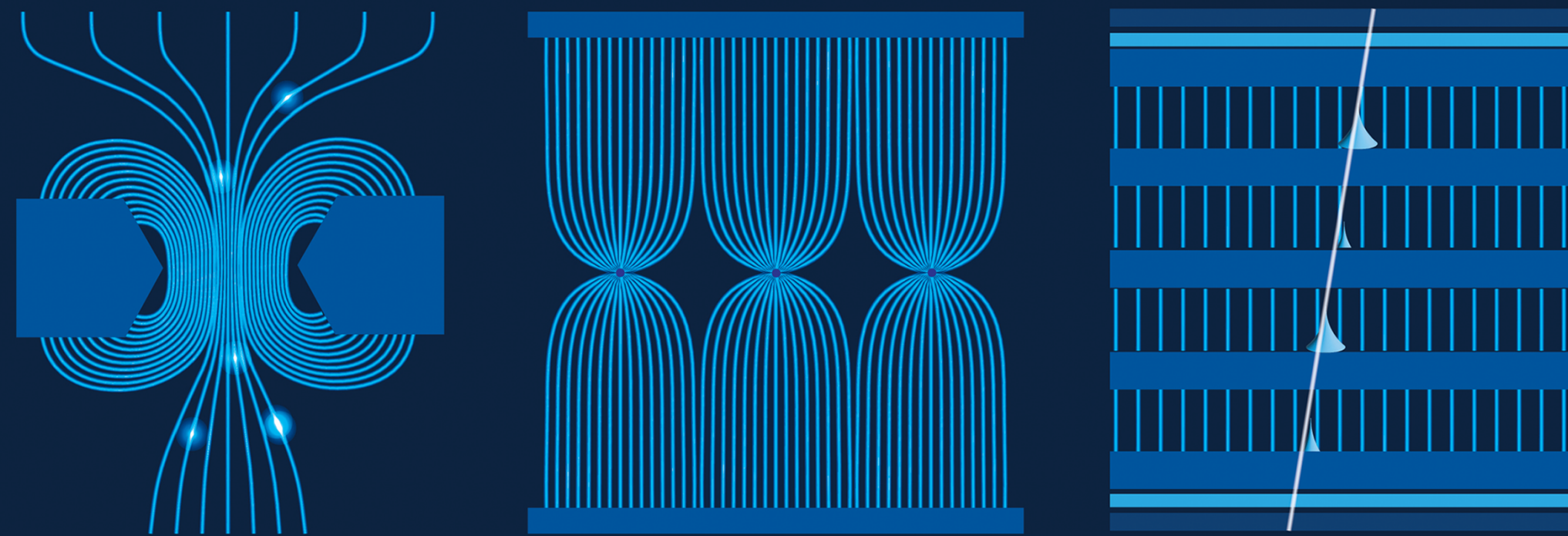
DRD1

Gaseous Detectors

School

CERN

November 27 - December 6, 2024



Scientific program

- Gaseous detector physics
- Gaseous detector technologies
- Readout technologies
- Simulation, modelling and reconstruction
- Manufacturing techniques
- Applications of gaseous detectors

The school consists of academic lectures and hands-on laboratory exercises.

The lecture program will cover MPGD, (M)RPC and wire-based detector technologies.

Lecture sessions are open to the community and can be followed in-person or by remote connection.

School website and registration

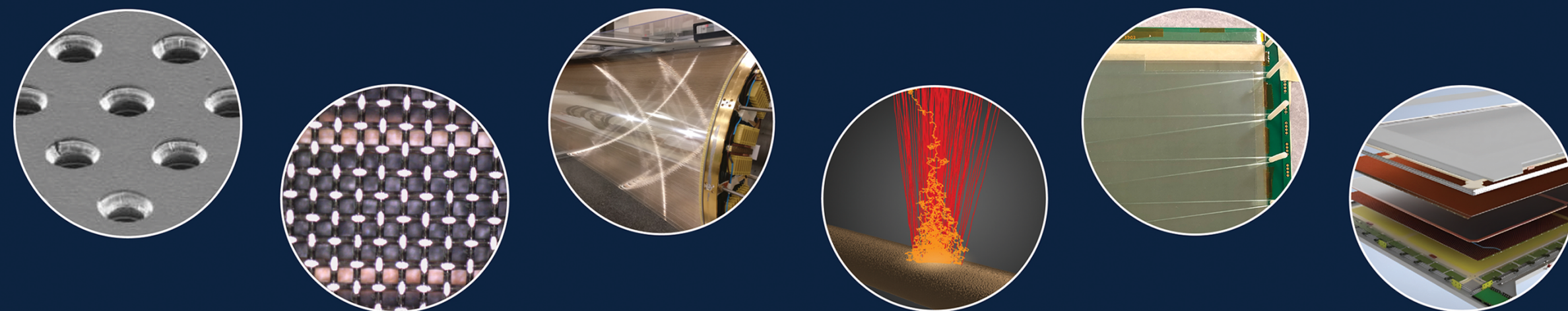
<https://indico.cern.ch/e/drd1school2024>

Application deadline: July 31, 2024

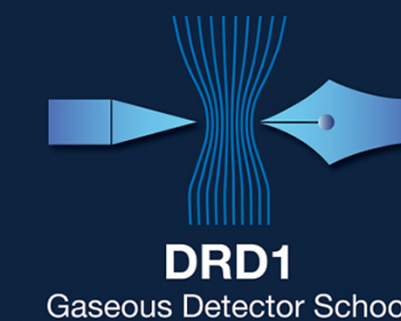
Free registration for students.

Students are invited to present a poster in a dedicated session.

Contact: drd1-school@cern.ch



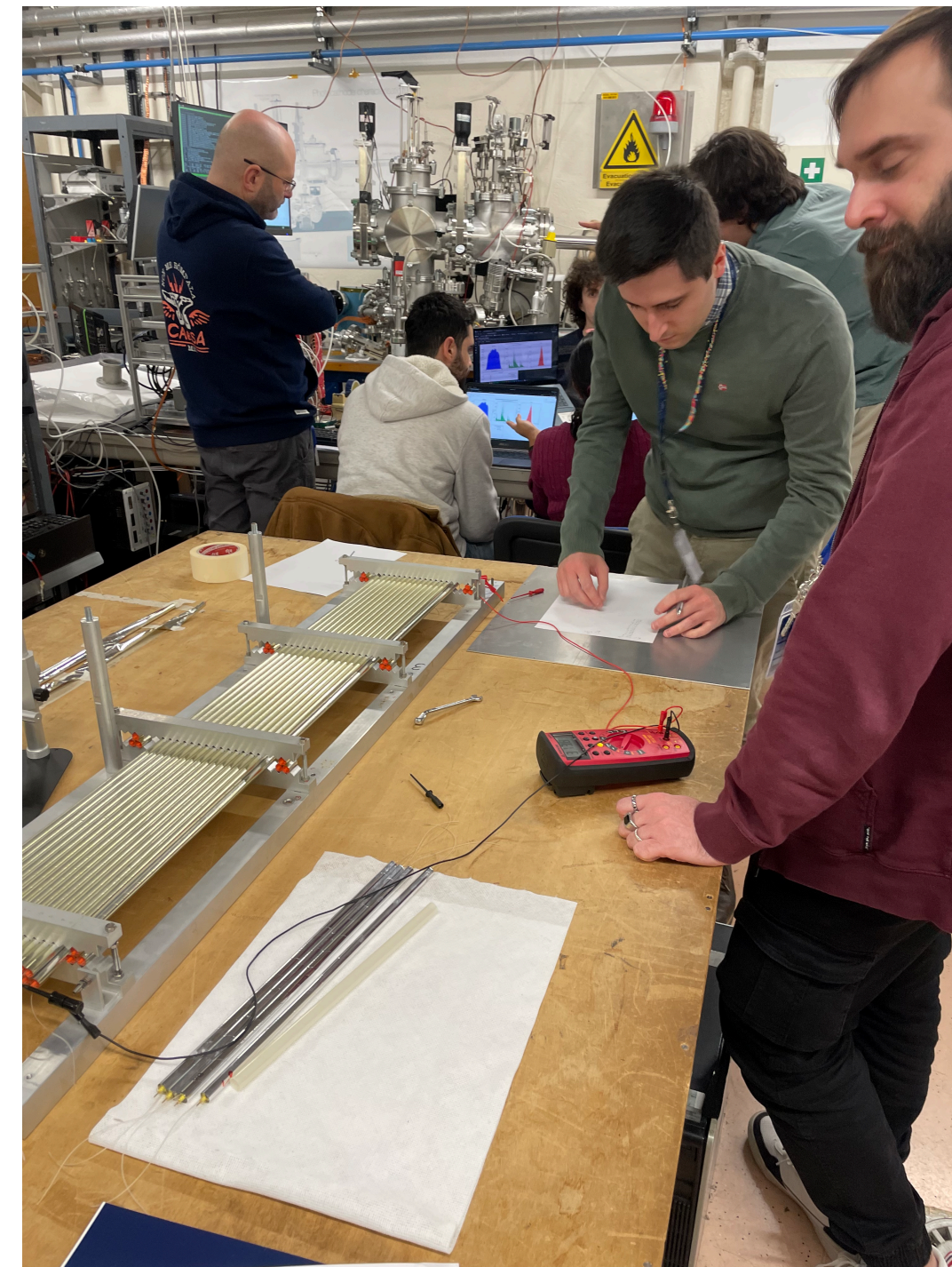
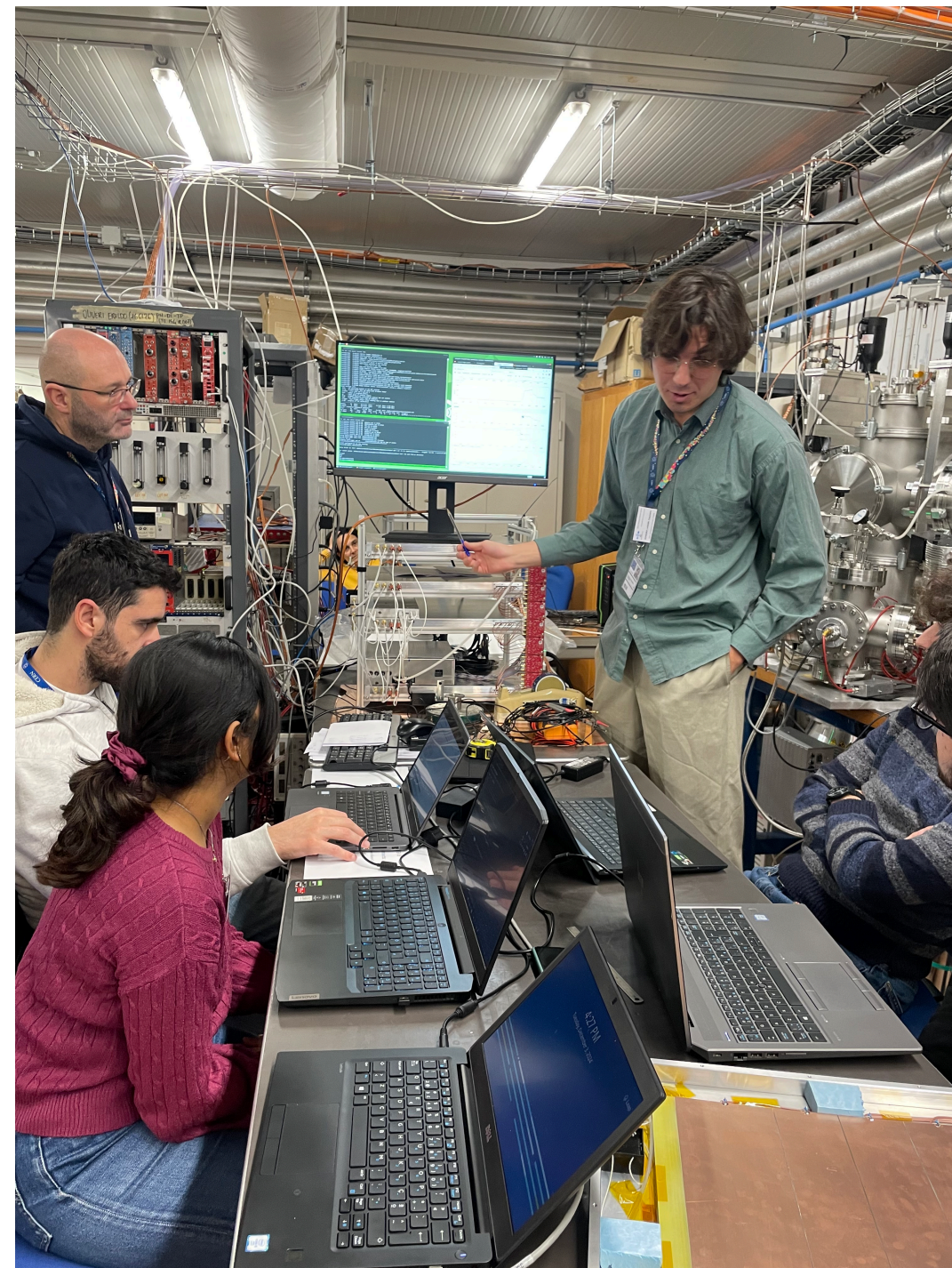
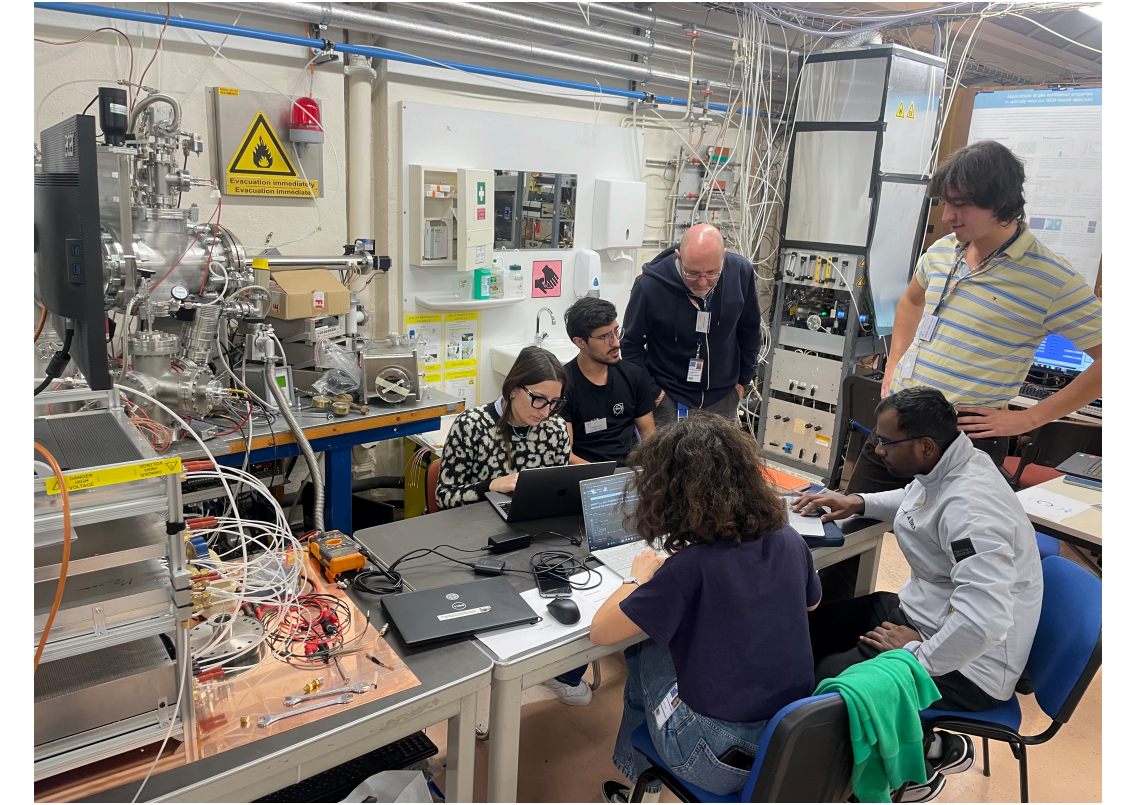
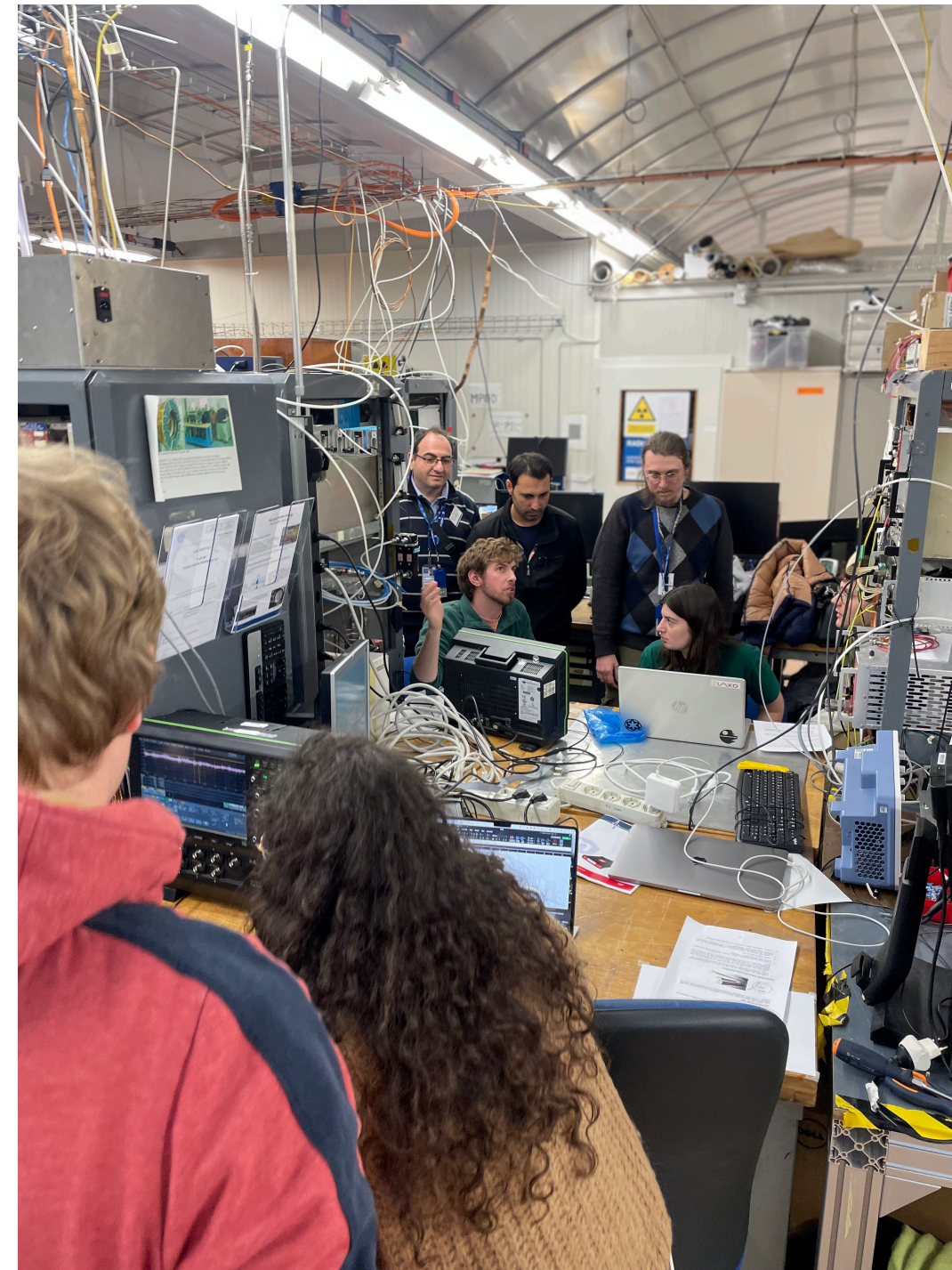
DRD1



Lecture program

Recordings are online, attached to talks as material





Poster session

Posters will be uploaded





Student presentations



Students are invited to give a presentations during WG8 session of DRD1 Collaboration Meeting (<https://indico.cern.ch/event/1442324/>) on Friday, Dec 13 (morning)

Content

Presentation should explain the setup and experimental methods of one of the lab exercises
Can contain results obtained during the exercise as well as additional analysis performed.
Some open questions and further analysis are given in the lab book.

Each group can present one lab exercise during the meeting

This afternoon: Session to work in lab groups to prepare presentation

Meeting point at 14:30 at building 154 (lab location)

Photos

Please let us know if you do not want your picture to be shared as part of reports on the school.



Lab group photo at 14:30 in building 154 (lab location)

Do you have photos that you want to share?

Please upload them here: <https://cernbox.cern.ch/s/E2rEfRFtWkgmfNz>

DRD1 collaboration

Development of Gaseous Detector Technologies



Advance the technological development and application of Gaseous Detectors and contribute to the dissemination of these technologies.

Development

Exploit existing technologies

Large size detectors
Improve performance and robustness

Develop novel technologies

Wire-based detectors, (M)RPCs, MPGDs

Dissemination

High-Energy Physics

ALICE, ATLAS, CMS, Compass, KLOE, BESIII

Fundamental research beyond HEP

LBNO-DEMO, active-target TPCs

Beyond fundamental research

Muon radiography, n-detection, X-ray radiographies

Production techniques and industrialisation

Common infrastructures

(Common labs, shared test beams)

Electronics

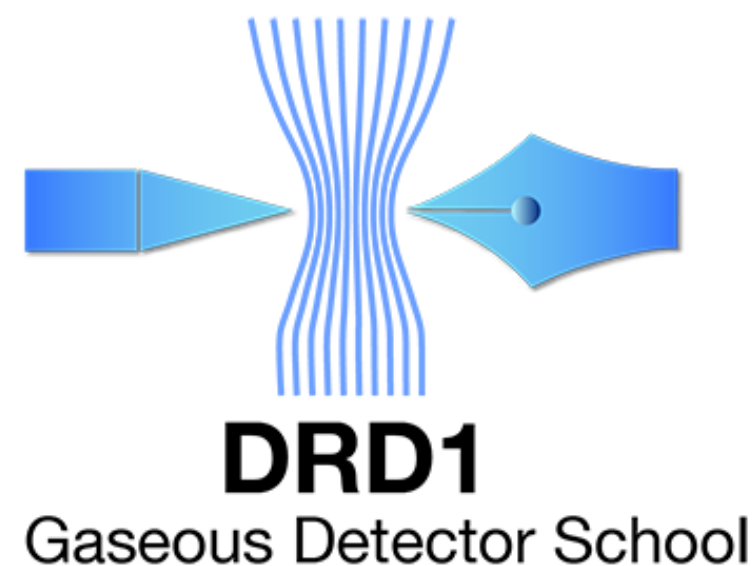
(Scalable Readout System SRS, instrumentation)

Simulation

(Garfield, Magboltz, Degrad, neBEM)

Training

(Gaseous Detector School, seminars, ...)



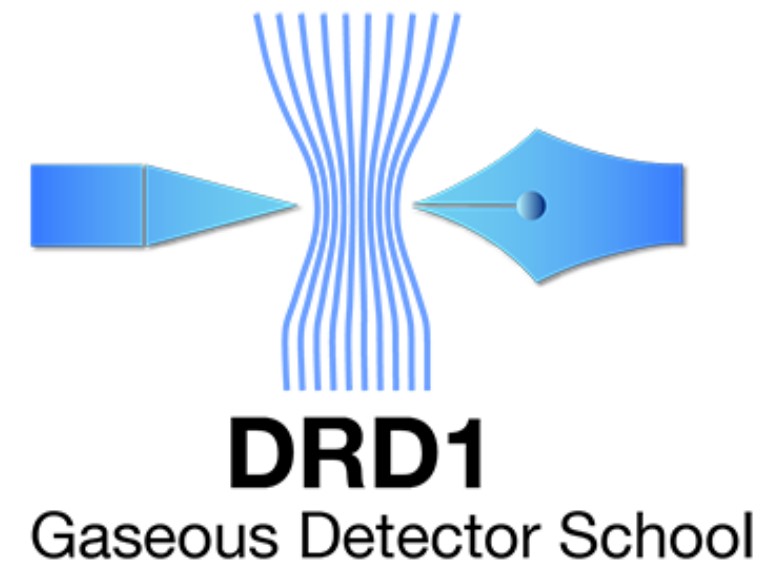
Thank you to all tutors and lecturers!

Marcello Abbrescia
Giulio Aielli
Theodoros
Alexopoulos
Chiara Alice
Muhammad Numan
Anwar
Alberto Blanco
Jona Bortfeldt
Florian Maximilian
Brunbauer
Roberto Cardarelli
Gabriel CHARLES
Marco Chiappini

Marco Cortesi
Valerio D'Amico
Nicola De Filippis
Rui De Oliveira
Gregorio Falsetti
Riccardo Farinelli
Esther Ferrer Ribas
Davide Fiorina
Piotr Gasik
Edoardo Gorini
Francesco Giuseppe
Gravili
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Luca Quaglia
Davide Raspino

Werner Riegler
Rinaldo Santonico
Fabio Sauli
Givi Sekhniaidze
Marco Sessa
Cayetano Soneira
Landín
Dario Stocco
Piet Verwilligen
Luis Alberto Vieira
Lopes
Peter Wintz



Thank you!