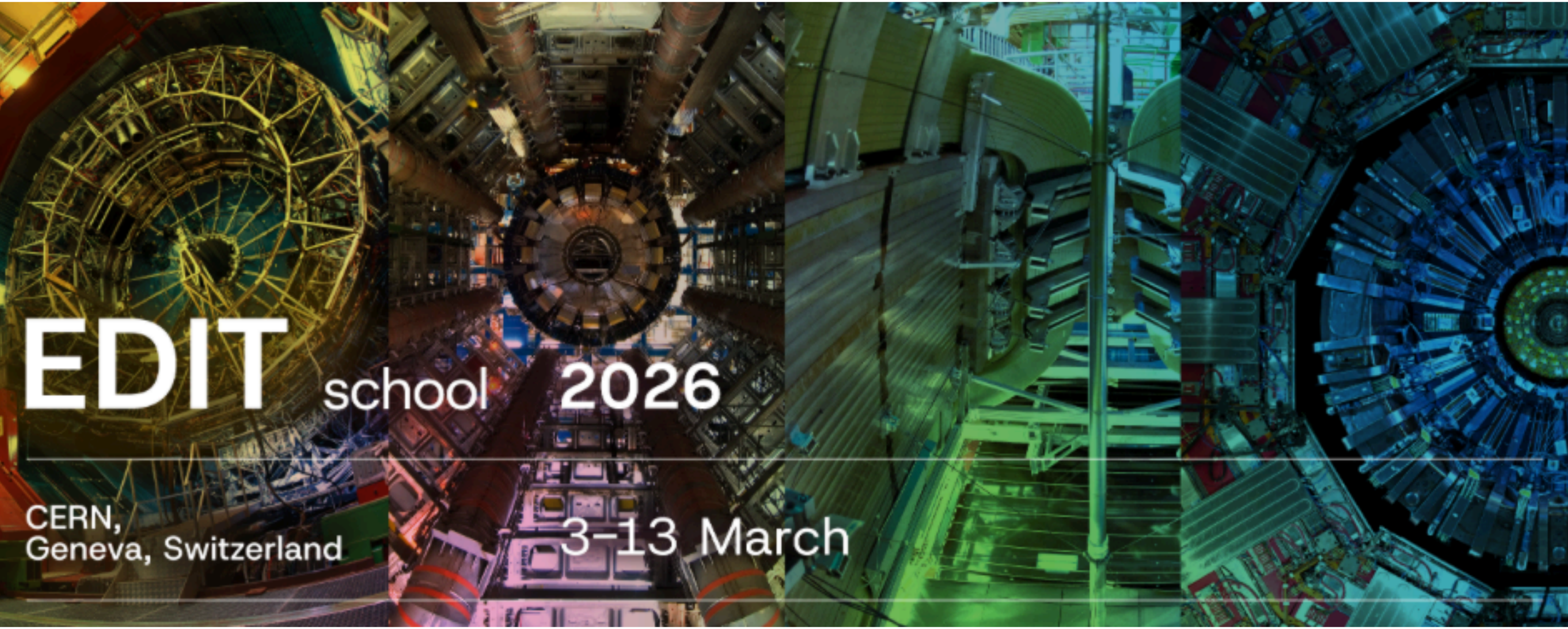


https://indico.cern.ch/e/edit2026

EDIT Instrumentation Schools

EDIT (Excellence in Detector and Instrumentation Technologies) is a series of schools aimed at young researchers, including graduate students and early-career postdocs, who seek to deepen their knowledge of detector technologies and instrumentation for particle physics.

Rotating across Europe, Asia, and North America, the EDIT Schools provide a unique opportunity for participants to learn about a wide range of detector technologies and experimental methods through academic courses and hands-on laboratories. This approach is especially valuable for physicists seeking to understand the performance and limitations of state-of-the-art technologies used in major experiments.

CERN will host the EDIT School in 2026, marking 15 years since its first edition. The program will feature lectures, keynote talks, and hands-on sessions.

Preliminary schedule

	Day1 (TUE 3.3.26)	Day2 (WED)	Day3 (THU)	Day4 (FRI)	Day5 (SAT)	Day6 (SUN	Day7 (MON 9.3.26)	Day8 (TUE)	Day9 (WED)	Day10 (THU)	Day11 (FRI)
8:30-9:30	LCOME (DG / RD) 9	Lecture 1 (Part 1)	Lecture 1 (Part 2)	Lecture 3 (Part 1)	Visits	Free	Lecture 3 (Part 2)	Lecture 5 (Part 1)	Lecture 5 (Part 2)	Lecture 6 (Part 2)	Students Contributions
break											
9:45-10:45	and Laboratory Intr	Lecture 2 (Part 1)	Lecture 2(Part 2)	Lecture 4 (Part 1)			Lecture 4 (Part 2)	Invited Talk 6 (1:30)	Lecture 6 (Part 1)	Invited Talk 8 (1:30)	Students Contributions
break											
11:00-12:30	Invited Talk 1	Invited Talk 2	Invited Talk 3	Invited Talk 4			Invited Talk 5	Homework Time	Invited Talk 7	Homework Time	
Lunch 12:30-14:00											
14:00-16:00	aboratory 1-8 (part 1	Laboratory 1-8 (part 1)	Laboratory 1-8 (part 1)	Laboratory 1-8 (part 1)	Free		Laboratory 1-8 (part 1)	Laboratory 1-8 (part 1)	Laboratory 1-8 (part 1)	Laboratory 1-8 (part 1)	Closing Sessions
break											
16:30-18:30	aboratory 1-8 (part 2	Laboratory 1-8 (part 2)	Laboratory 1-8 (part 2)	Laboratory 1-8 (part 2)			Laboratory 1-8 (part 2)	Laboratory 1-8 (part 2)	Laboratory 1-8 (part 2)	Laboratory 1-8 (part 2)	
18:30 - 21:00		Poster session 1	Poster session 2					Social Dinner			

- 11 day school: Wed to Fri
- Saturday: visits
- Sunday: free
- 2 poster sessions
- Social Dinner
- Student presentations

Lecture program

Core Lectures

- Particle Interactions with Matter
- Silicon Detectors
- Gaseous Detectors
- Photon Detectors
- Signal Processing and Front-End Electronics
- Modelling and Simulation

2h each, split in 2 different days

Lecture program is available

Key-Note Contributions

- Avenues for the Physics to Come
- Particle Accelerators
- Collider Physics and Beyond
- Future Detectors for Tracking
- Future Detectors for Calorimetry
- Future Detectors for Timing
- Future Detectors for Neutrinos
- Quantum Sensors
- Particle Physics and Medical Application; Application outside HEP (Michael Campbell)

1h each, usually at the end of morning lectures

Lecture program

Core Lectures

- Particle Interactions with Matter (Werner Riegler)
- Silicon Detectors (Frank Hartmann)
- Gaseous Detectors
- Photon Detectors (Sune Jakobsen)
- Signal Processing and Front-End Electronics (Rafael Ballabriga, Xavi Llopart)
- Modelling and Simulation (Djunes Janssens)

2h each, split in 2 different days

Lecture program is available

Key-Note Contributions

- Avenues for the Physics to Come
- Particle Accelerators (Daniel Schulte)
- Collider Physics and Beyond
- Future Detectors for Tracking (Jerome Baudot)
- Future Detectors for Calorimetry (Eva Sicking)
- Future Detectors for Timing (Nicolo Cartiglia)
- Future Detectors for Neutrinos (Filippo Resnati)
- Quantum Sensors (Michael Doser)
- Particle Physics and Medical Application; Application outside HEP (Michael Campbell)

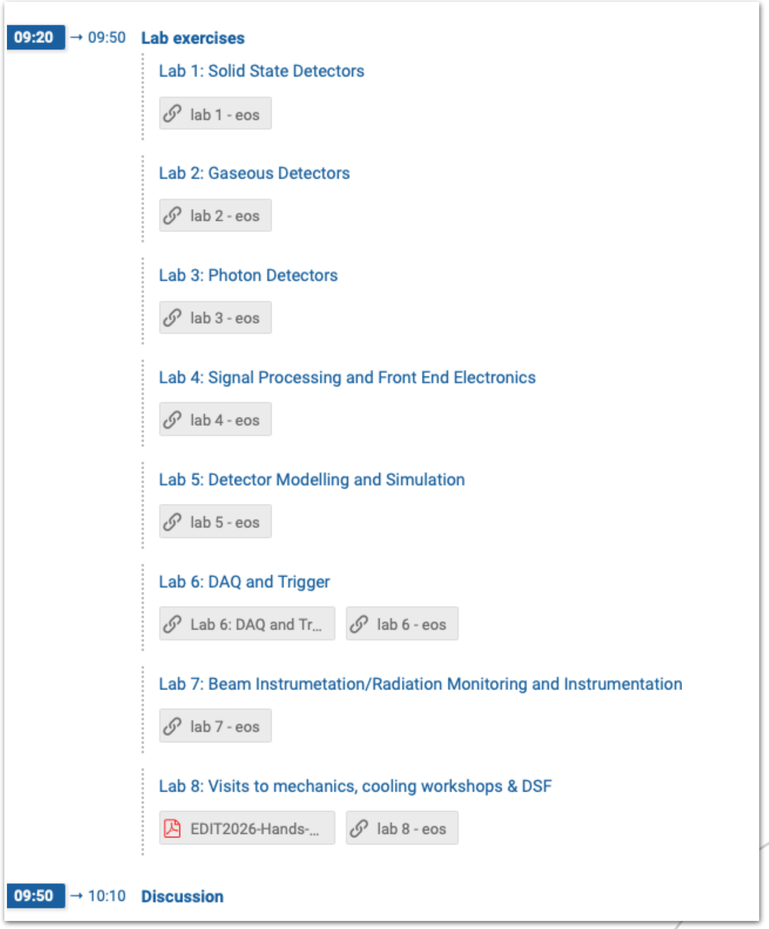
1h each, usually at the end of morning lectures

Lab exercises

- Silicon Detectors
- Gaseous Detectors
- Photon Detectors
- Signal Processing and Front-End Electronics
- Detector Modelling and Simulation
- DAQ and Trigger
- Beam Instrumentation/Radiation Monitoring and Instrumentation
- Visit focusing on: Cooling and Mechanics

6 students per group

Can be further split in 2x3 or 3x2 depending on sub-activities in each lab course



- Key people for each exercise defined
- Preparation meetings to track progress of lab preparation

Students

- 48 students are accepted (90% confirmed participation so far)
- Will be split in 8 groups of 6 people each

Applications:
- 289 applicants
- Most applications received in ≈1-2 weeks before deadline
- Reviewed by >= 2 persons per application
- Selection based on averaged score between motivation statement, CV and reference letter
- Waiting list in case accepted students drop out

Financial
- CHF 200 fee includes coffee breaks, social dinner
- Travel and accommodation must be covered by participants' institutes

- MSc, PhD students, post-docs

- Applications from 41 different countries
- Selected students from 15 different countries

- Good gender balance (53/47% m/f)

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