



FZU

Institute of Physics
of the Czech
Academy of Sciences

Invitation

to the seminar of Division of Elementary Particle Physics of the
Institute of Physics of the Czech Academy of Sciences



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The ATLAS upgrade and the contribution of the Laboratory for Testing of Semiconductor Particle Detectors

Abstract: The seminar will focus on LHC upgrades, particularly the ATLAS experiment and the development of the new Inner Tracker (ITk). As part of the High-Luminosity LHC (HL-LHC) project, the ITk will replace the current inner detector with an advanced all-silicon system designed to withstand high radiation levels. Key features include enhanced radiation resistance, increased readout channels, extended pseudorapidity coverage, and a larger active detection area, enabling more precise tracking of charged particles in proton-proton collisions. The seminar will also cover quality control (QC) and quality assurance (QA) procedures for ITk strip sensors at FZU, the only facility performing both types of testing and also contributing to ITk strip test beams and irradiation campaigns.

Additionally, the seminar will also cover further steps in the production of the ITk strip detector, such as module assembly and testing, loading of modules to staves and petals, as well as final integration of all components into the global barrel and endcap detector structures.

When: Thursday, February 13, 2025 at 2PM

Where: Dvořák hall, FZU, Pod Vodárenskou věží 1, Prague

For more information, please see <https://indico.fzu.cz/event/279/>