

## Qualification of the LUCID-3 prototypes for the High Luminosity LUCID upgrade for the ATLAS experiment

The LUCID detector is the main luminometer of the ATLAS experiment. For the High-luminosity LHC phase, the present detector will need a major upgrade to be able to properly measure the luminosity in the new conditions provided by the LHC accelerator. Several prototypes were installed in ATLAS during the present LHC run to validate the final LUCID-3 design, based both on photomultipliers and optical fibers. The acquired data must be analyzed to assess their performance in terms of stability, linearity, robustness and reliability. The candidate is expected to perform data analysis and acquire experience in the operation of the prototypes during data taking, including TDAQ and DCS daily operations.