



Contribution ID: 643 Contribution code: TUPC75

Type: **Poster Presentation**

HL-LHC series collimators: key technical requirements, crucial production challenges and risk mitigation plan

Tuesday, 21 May 2024 16:00 (2 hours)

In view of High Luminosity (HL) - Large Hadron Collider (LHC) project, an upgraded collimation system has been developed to accommodate a rise of ten times of the integrated luminosity compared to the LHC. A new series of collimators will be produced and installed in the machine during the Long Shutdown 3 (LS3) to take place during 2026-2028. The updated design incorporates cutting-edge technologies to meet the demanding operating requirements.

Multiple production activities are recognized as critical to ensure the quality of the collimators. Comprehensive qualification checks of the production procedures are planned, and functional tests will be conducted to validate the performance of each unit produced.

Footnotes

Funding Agency

Paper preparation format

Word

Region represented

Europe

Primary author: PICCINNI, Carla (European Organization for Nuclear Research)

Co-authors: PERILLO MARCONE, Antonio (European Organization for Nuclear Research); SENAJOVA, Dominika (European Organization for Nuclear Research); BAILLARD, Dylan (European Organization for Nuclear Research); GRENIER-BOLEY, Edouard (European Organization for Nuclear Research); NUIRY, Francois-Xavier (European Organization for Nuclear Research); CALVIANI, Marco (European Organization for Nuclear Research); SEIDENBINDER, Regis (European Organization for Nuclear Research); REDAELLI, Stefano (European Organization for Nuclear Research)

Presenter: PICCINNI, Carla (European Organization for Nuclear Research)

Session Classification: Tuesday Poster Session

Track Classification: MC1: Colliders and other Particle and Nuclear and Physics Accelerators:
MC1.T19 Collimation