



Contribution ID: 1614 Contribution code: TUPS08

Type: **Poster Presentation**

## HL-LHC magnets production: building a complex planning to identify bottlenecks

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

The High-Luminosity LHC project aims to enhance the integrated luminosity of the LHC machine by a factor of 10, by upgrading various components located in the LHC tunnel just before the collision point, with cutting-edge technologies. Among these innovations are the new superconducting magnets equipped with a combination of Nb-Ti and Nb<sub>3</sub>Sn. Over 100 magnets are being produced, each undergoing multiple production and test stages across different facilities worldwide, including labs outside CERN. Various technology systems are integrated into the magnets, involving collaboration with different groups for assembly work.

Recognizing the complexity of this production process, a decision was made to establish a comprehensive production and test schedule at CERN. This paper elucidates the schedule tools implemented to oversee the entire resource loaded process. The compiled data serves to identify strategic or technical bottlenecks in the production flow. By adopting such an approach and simulating various production scenarios, the aim is to proactively address potential conflicts, ensure the optimal allocation of resources and the readiness for installation during the Long Shutdown 3.

### Footnotes

### Funding Agency

### Paper preparation format

LaTeX

### Region represented

Europe

**Primary author:** FLEURY, Sarah (European Organization for Nuclear Research)

**Co-authors:** TODESCO, Ezio (European Organization for Nuclear Research); BARBERAN MARIN, Maria (European Organization for Nuclear Research); BERNARDINI, Marzia (European Organization for Nuclear Research)

**Presenter:** FLEURY, Sarah (European Organization for Nuclear Research)

**Session Classification:** Tuesday Poster Session

