

# **Tutorial: Modelling control loops in beam dynamics simulations**

*Thursday, October 26, 2023 9:10 AM (45 minutes)*

In an increasing amount of cases, a precise description of beam motion in synchrotrons requires modelling control loops alongside with collective effects. The contribution shows the generic methods, implemented in the Beam Longitudinal Dynamics simulation suite BLonD, to include global and/or local control loops in beam dynamics simulations. Furthermore, it details the implementation of CERN-specific LLRF models and their application in recent studies.

## **Keyword**

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**Session Classification:** Tutorial

**Track Classification:** Other