Abstract:
After its second successful run period, the LHC shuts down for two years with the plan of being recommissioned in 2021 for a three-year physics production period, the Run-III. The future restart of the LHC coincides with the completion of the LIU project, offering to the LHC the opportunity and the challenge to operate with up to two times higher bunch intensity. For this purpose the LHC Run-III Configuration Working Group (LCR3) was formed to identify the limitations on the various LHC systems, and seek possible mitigations, or constraints in terms of the accepted beam parameters. The LCR3 is in charge of establishing operational scenarios and estimating them in terms of their integrated performance. This talk summarizes the status of the working group, highlights the known constraints and suggests a preliminary version of the LHC cycle in Run-III.