

Numerical Tools for Studying Beam Dynamics Effects on Luminosity Calibration: COMBI and XSUITE

Tuesday 11 March 2025 17:10 (15 minutes)

- XSUITE: Overview and Recent Luminosity Developments
- Benchmarking Luminosity Calculations: COMBI vs. XSUITE (private version)
- First Studies on Linear Coupling (Local and Global) as an Example Case
- Potential Uses of XSUITE in Future Studies and Plans (e.g., adding the entire LHC lattice, including errors, long-range beam-beam interactions, etc.)

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Session Classification: Impact of accelerator instrumental issues on luminosity calibrations