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## Correction of nonlinear lattice with closed orbit modulation

*Thursday, 23 May 2024 16:00 (2 hours)*

We propose to correct nonlinear lattice optics with the closed-orbit modulation technique. Closed orbit modulation with large amplitude samples the nonlinear optics. Fitting such data measured on the machine to the lattice model with appropriate lattice variables can reveal the nonlinear errors and provide means for correction. We demonstrate the technique in both simulation and experiments.

### Footnotes

### Funding Agency

### Paper preparation format

### Region represented

North America

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**Session Classification:** Thursday Poster Session

**Track Classification:** MC5: Beam Dynamics and EM Fields: MC5.D01 Beam Optics Lattices, Correction Schemes, Transport