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# Optimization of lattices for nonlinear integrable optics

*Wednesday 4 June 2025 16:00 (2 hours)*

Nonlinear integrable optics (NIO) of the type proposed by Danilov and Nagaitsev place strict constraints on the remainder of the lattice. The chromaticity must be closely controlled for stable operation with NIO, but the inclusion of sextuples perturbs the dynamics just as in a typical linear lattice. Alternative NIO lattice configurations are considered and benchmarked against experimental results with NIO in IOTA.

## Footnotes

## Paper preparation format

LaTeX

## Region represented

America

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