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Decoherence of kicked beams with nonlinear integrable optics

Wednesday 4 June 2025 16:00 (2 hours)

Nonlinear integrable optics may improve the stability of intense beams to collective effects through Landau damping from large amplitude-dependent detuning. This same detuning means that the coherent oscillations of kicked beams decohere quickly, adding challenges to experimental measurements. Simulation studies of the decoherence patterns of kicked beams in NIO are presented and benchmarked against experimental results in IOTA.

Footnotes

Paper preparation format

LaTeX

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