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Preparation for experimental demonstration of arbitrary correlation generation

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A method using transverse wigglers has been proposed for imparting arbitrary correlation on the transverse phase space. This concept employs transverse wigglers to introduce cosine-like modulations on the phase space. Similar to the approximation of periodic function by Fourier series, the series of properly designed cosine modulations approximates arbitrary correlations. Currently, preparation is underway for the experimental demonstration of the concept. The planned demonstration includes three simple examples: profile shaping, linearization, and saw-tooth correlation. We present the status of the experimental preparation.

Footnotes

Funding Agency

Paper preparation format

LaTeX

Region represented

North America

Primary author: HA, Gwanghui (Northern Illinois University)

Presenter: HA, Gwanghui (Northern Illinois University)

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