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Matched transport of intense and coasting beams through quadrupole channels

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For the time being, determining the cell-to-cell periodic solution for transporting intense beams has been limited to the spatial envelope. Recently, a numerical method for provision of full 4d-periodicity of all 10 beam moments of an intense 4d-coupled beam has been developed and benchmarked with tracking simulations. For instance, it will pave the path towards exploring the potential of beam spinning for beam quality improvement as proposed by Y.-L. Cheon et al.

Footnotes

Funding Agency

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