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Bunch filamentation within resonance islands

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This paper presents turn-by-turn observations of internal and external filamentation within the Poincare contours of a fourth order resonance during an Accelerator Physics Experiment (APEX) in the Relativistic Heavy Ion Collider (RHIC). Beam position monitors measured the turn-by-turn evolution of the center-of-charge of the captured beam. The fraction of beam outside the island soon comes to contribute marginally to the center-of-charge signal. Simulation results are compared with experimental data.

Footnotes

Paper preparation format

LaTeX

Region represented

America

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