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New measurement techniques for gear changing research using DESIREE

Wednesday 4 June 2025 16:00 (2 hours)

In this work we cover some of the newer techniques developed to measure the effects of a gear changing system maintained in the double electrostatic ion ring DESIREE at Stockholm University. Gear-changing is a collider synchronization method where two rings with different harmonic numbers in them maintain collisions through different velocities, pathlengths or a combination of the two. This system has been demonstrated using the low energy ion collider DESIREE at Stockholm university. We have not only continued our previous methods of studying the beam using a repeating pattern technique where one bucket in each ring is intentionally left empty, but we now also use recently installed pickups outside of the merger region to study the beams separately while they collide.

Footnotes

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Word

Region represented

America

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