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Direct injection into the IsoDAR Cyclotron using a RFQ
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— Beginning in the 1970s, the use of Radio Frequency Quadrupoles (RFQs) has been pervasive in linear accelerators in order to accelerate, bunch, and separate ion species. Current research suggests this may be an ideal way to inject a low energy H2+ beam axially into a cyclotron. The IsoDAR (Isotope Decay At Rest) experiment aims to implement this injection system in order to achieve higher Low Energy Beam Transport (LEBT) efficiencies and ultimately construct a novel compact neutrino factory to test the hypothesis of sterile neutrinos. This talk will focus on the research and development needed to implement a RFQ into the IsoDAR experiment.

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