The IsoDAR cyclotron design

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Abstract

The IsoDAR cyclotron will provide currents much higher than those presently achievable. Developed as an intense source for proposed neutrino experiment, it can form the injector for the high power linac or other accelerators proposed for ADSRs, .as well as other applications. Use of H2+ as the accelerated ion, with a novel front end RFQ, will produce beams of 60 MeV protons at currents above 10 mA. We describe progress with the development of the ion source and the design of the RFQ and injection system, and the proposed timeline for construction.