

Abstract Submitted  
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**ECR Ion Source for a High-Brightness Cyclotron**<sup>1</sup> JUSTIN COMEAUX, PETER MCINTYRE, SAEED ASSADI, Texas A&M University — New technology is being developed for high-brightness, high-current cyclotrons with performance benefits for accelerator-driven subcritical fission power, medical isotope production, and proton beam cancer therapy. This paper describes the design for a 65 kV electron cyclotron resonance (ECR) ion source that will provide high-brightness beam for injection into the cyclotron. The ion source is modeled closely upon the one that is used at the Paul Scherrer Institute. Modifications are being made to provide enhanced brightness and compatibility for higher-current operation.

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