

## RECENT RESULTS AND OPERATION AT 18 GHZ WITH SECRAL

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### Abstract

An advanced superconducting ECR ion source SECRAL with 18GHz has been put into operation to provide highly charged heavy ion beams for HIRFL (Heavy Ion Research Facility in Lanzhou) cyclotron since May 2007. The paper will give an overview of recent operation status and test results for enhancing performance of the SECRAL ECR ion source. Detailed experimental results with an aluminium chamber, 14+18 GHz double frequency heating, emittance measurements, and bremsstrahlung measurements will be presented. Finally some upgrading program for SECRAL will be reported.

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