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EXPERIMENTAL STUDY OF INNER SHELL IONIZATION IN AN ECRIS PLASMA

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Abstract content (Max 300 words) http://events.saip.org.za/getFile.py/?target=_blank **Formatting** **Special chars**

A new plasma diagnostic technique is currently being investigated with the Electron Cyclotron Resonance Ion Source (ECRIS) at iThemba LABS. With this diagnostic, it would be possible to gauge the average ionization state in the line-of-sight volume of an ECRIS plasma by non-destructively measuring the characteristic x-rays emitted from the plasma. This technique will especially be valuable for plasma simulations to gauge the accuracy of assumptions built into the simulations. We will report here on the results of preliminary measurements on the ECR ion source at iThemba LABS.

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PhD

Main supervisor (name and email) and his / her institution

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