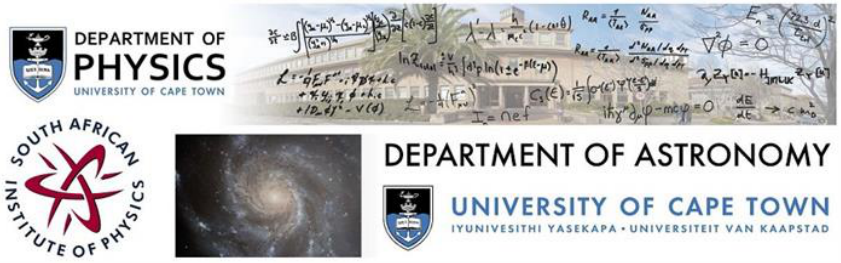


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# EXPERIMENTAL STUDY OF INNER SHELL IONIZATION IN AN ECRIS PLASMA

*Wednesday, 6 July 2016 11:30 (20 minutes)*


## Abstract content <br>   (Max 300 words)<br><a href="http://events.saip.org.za/getFile.py/a target="_blank">Formatting &<br>Special chars</a>

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.


## Apply to be<br> considered for a student <br>   award (Yes / No)?

Yes

## Level for award<br> (Hons, MSc, <br>   PhD, N/A)?

PhD

## Main supervisor (name and email)<br>and his / her institution

Hannu Koivisto, hannu.a.koivisto@jyu.fi, University of Jyvaskyla, Finland

## Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

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**Primary author:** Mr SAKILDIEN, Muneer (iThemba LABS)

**Co-author:** Dr JONES, Pete (iThemba LABS)

**Presenter:** Mr SAKILDIEN, Muneer (iThemba LABS)

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