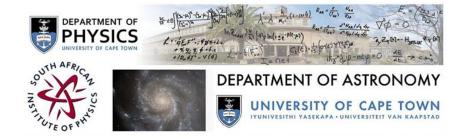
SAIP2016



Contribution ID: 349 Type: Oral Presentation

EXPERIMENTAL STUDY OF INNER SHELL IONIZATION IN AN ECRIS PLASMA

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

Abstract content
 (Max 300 words)
 dry-Formatting &
 &classed 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.

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

Yes

Level for award

dr> (Hons, MSc,

%nbsp; PhD, N/A)?

PhD

Main supervisor (name and email)

sand his / her institution

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

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

No

Please indicate whether

-this abstract may be

-published online

-(Yes / No)

Y

Primary author: Mr SAKILDIEN, Muneer (iThemba LABS)

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

Presenter: Mr SAKILDIEN, Muneer (iThemba LABS)

Session Classification: Nuclear, Particle and Radiation Physics (1)

Track Classification: Track B - Nuclear, Particle and Radiation Physics