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# PLASMA DIAGNOSTICS ON THE ECRIS

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Various techniques are applied to Electron Cyclotron Resonance Ion Sources (ECRIS) to enhance high charge state ion beam production, but many of these remain not well understood. With K $\alpha$  plasma diagnostics it is possible to develop a greater understanding of these techniques and in so doing improve the performance of the ion source for high charge state production. Two of the most commonly used techniques are gas mixing and double frequency heating. Here we will report on the results of preliminary measurements on the ECR ion source at iThemba LABS and discuss future measurements

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

No

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

N/A

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

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

No

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