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## A PAPER-32 Stokes I Sky Catalogue

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

Observations of the redshifted hyperfine Hydrogen 21 centimeters line from the Epoch of Reionization (EoR) are the most promising tools to investigate the birth of the first stars and galaxies as well as the history of the intergalactic medium. Such observations are challenged by the presence of foreground emission that is a few orders of magnitude stronger than the 21-cm signal, requiring very accurate calibration. I present my work to derive an accurate all-sky model and primary beam models for the Precision Array to Probe the EoR (PAPER), in order to improve the calibration accuracy of EoR observations.

References:

Daniel C. Jacobs et al. 2013, 'A flux scale for Southern Hemisphere 21cm EoR experiments', ApJ 776 108  
Interferometry and Synthesis in Radio Astronomy A. Richard Thompson, James M. Moran, George W. Swenson, Jr

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

Yes

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

MSc

**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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Yes

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