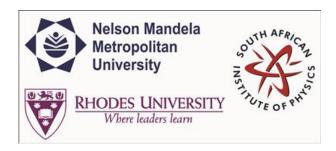
## **SAIP2015**



Contribution ID: 25 Type: Oral Presentation

## Large N Conformal Field Theory from Gauge Theory/ Gravity Duality

Tuesday, 30 June 2015 14:00 (20 minutes)

Abstract content <br/> &nbsp; (Max 300 words)<br/> dry-<a href="http://events.saip.org.za/getFile.py/starget="\_blank">Formatting &<br/> &classed chars</a>

We consider operators in the su(2) sector of N=4 super-Yang-Mills theory, that have a classical dimension of order N. The correlation functions of these operators receive corrections at large N from non-planar diagrams. We compute the spectrum of anomalous dimensions by enforcing the global su(2) symmetry algebra of the theory. The computation entails computing the exact form of the su(2) generators. Our results provide further support for integrability in large N but non-planar limits of the theory.

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

Yes

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

PhD

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

Prof. Robert de Mello Koch email: robert.demellokoch@gmail.com University of the Witwatersrand

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

No

Please indicate whether<br/>
-br>this abstract may be<br/>
-published online<br/>
-br>(Yes / No)

Yes

**Primary author:** Mr HASINA TAHIRIDIMBISOA, Nirina Maurice (University of the Witwatersrand)

**Co-author:** Prof. DE MELLO KOCH, Robert (University of the Witwatersrand)

**Presenter:** Mr HASINA TAHIRIDIMBISOA, Nirina Maurice (University of the Witwatersrand)

Session Classification: TCP

**Track Classification:** Track G - Theoretical and Computational Physics