



Contribution ID: 67

Type: Oral Presentation

## SO(N) restricted Schur polynomials

*Tuesday, 8 July 2014 11:30 (20 minutes)*

**Abstract content** (Max 300 words) **Formatting & Special chars**

Restricted Schur polynomials constitute a basis for the 1/4-BPS sector of  $N = 4$  super Yang-Mills theory with a  $U(N)$  gauge group. Using the AdS/CFT correspondence, these operators are interpreted as certain D-brane states in the dual gravity theory in the large  $N$  limit. It is interesting to study whether or not restricted Schurs constitute a basis for the 1/4-BPS sector of the theory with  $SO(N)$  gauge group. I present evidence that the counting of restricted Schurs matches the number of 1/4-BPS states for  $SO(N)$ . I further discuss the possibility of the  $SO(N)$  restricted Schurs being orthogonal.

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

YES

**Level for award (Hons, MSc, PhD)?**

PhD

**Main supervisor (name and email) and his / her institution**

Robert de Mello Koch  
 robert.demellokoch@wits.ac.za  
 University of the Witwatersrand

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

No

**Primary author:** Mr KEMP, Garreth (University of the Witwatersrand)

**Presenter:** Mr KEMP, Garreth (University of the Witwatersrand)

**Session Classification:** Theoretical

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