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Beyond $\frac{1}{2}$ -BPS: Symmetry Generators in $su(2)$ and $su(3)$

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

The spectrum of anomalous dimensions in large N , non-planar limits of $N=4$ supersymmetric Yang-Mills theories are considered. Restricted Schur polynomials provide a useful basis for this study. We will argue that the action of the one loop dilatation operator on restricted Schur operators is largely determined by the $su(2)$ R-symmetry algebra. Our results generalize existing studies, allowing a study of operators that are not $\frac{1}{2}$ -BPS or small deformations thereof. An application of this result would be to study operators whose dimensions grow like $N^{\sup>2}$. These operators are dual to new background spacetime geometries in the quantum gravity.

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

Yes

Level for award (Hons, MSc, PhD, N/A)?

MSc

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

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