



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Giant Graviton Expansions for line operator indices

(Zoom Seminar)

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Zoom link shall be shared separately



The superconformal index is a useful tool to test dualities like AdS/CFT correspondence. In this talk we consider AdS/CFT correspondence for the $N=4$ $U(N)$ SYM with the insertion of Wilson line operators. On the AdS side they are realized as different kinds of branes depending on the representation of the inserted lines. The index with such line operator insertions depends on the gauge theory rank N and the representation R of the line. Based on the analysis on the AdS side, we propose new formulas (giant graviton expansions) for the finite N indices for the fundamental and anti-symmetric representations.