1046-22-263   **jennifer d berg*** (`berg.jennifer@gmail.com`), 14 winter street, no.1, leominster, MA 01453. *On the Casimir fields of $q(n)^{(1)}$*. Preliminary report.

The goal of the project introduced here is to investigate the properties of the "Casimir fields" of the Lie superalgebra $q(n)$, that is the vertex operators obtained from applying the state fields correspondence to the generators of the center of $\mathcal{U}(q(n))$. Connecting the calculations to Feynman diagrams opens the door to techniques which may be used to verify that all the "Casimir fields" are, in fact central. (Received August 24, 2008)

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