Diamond cone for $\mathfrak{spo}(2m, 1)$

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Abstract:
We define the diamond cone for the Lie superalgebra $\mathfrak{spo}(2m, 1)$, considering the (covariant) tensor representation of $\mathfrak{spo}(2m, 1)$. The diamond cone is no more indecomposable. Nevertheless, we give a basis for each indecomposable component, using quasistandard Young tableaux for $\mathfrak{spo}(2m, 1)$.

We realize a bijection between the set of semistandard tableaux with shape λ and the set of quasistandard tableaux with shape $\mu \leq \lambda$. This gives the compatibility of the diamond cone with the natural stratification of the reduced shape algebra.
(Join work with Boujemâa Agrebaoui and Mohamed Ali Maalaoui)

1