Representation Theory Seminar

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Title:

Bases of infinite-dimensional tensor product representations of $\mathfrak{osp}(1|2n)$

Abstract:

We consider the complex orthosymplectic Lie superalgebra $\mathfrak{osp}(1|2n)$ acting on the super vector space $\mathbb{C}[x_1, x_2, \ldots, x_n] \otimes_{\mathbb{C}} \mathbb{C}^{1|2n}$, where $\mathfrak{osp}(1|2n)$ acts via differential operators on polynomials $\mathbb{C}[x_1, x_2, \ldots, x_n]$ (Weyl representation). The resulting tensor product representation decomposes into the direct sum of two simple infinite-dimensional submodules. We provide an explicit basis for each of these modules by introducing certain differential operators. This is joint work with D. Grantcharov.

Wednesday, November 6, 2019
Sid Richardson 333 at 3:30 pm