

## Derived representation type of Schur superalgebras

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Let  $S(m|n, d)$  be a Schur superalgebra over an algebraically closed field  $K$  of characteristic  $p \neq 2$ . The representation type of Schur superalgebra  $S(m|n, d)$  was determined by Hemmer, Kujawa and Nakano in 2006. The derived representation type for (classical) Schur algebra  $S(n, d)$  was determined by Bekkert and Futorny in 2003.

In this note we use these results to classify the derived representation type of the Schur superalgebra  $S(m|n, d)$  as follows:

a) Assume that algebra  $S(m|n, d)$  is semisimple, that is, one of the following conditions is satisfied: (i)  $p = 0$ , (ii)  $d < p$ , (iii)  $m = n = 1$  and  $p$  does not divide  $d$ .

Then  $S(m|n, d)$  is of derived finite representation type.

b) If  $S(m|n, d)$  is not semisimple, then  $S(m|n, d)$  is of derived wild representation type.