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Vera Serganova* (serganov@math.berkeley.edu), Department of Mathematics, UC Berkeley, Berkeley, CA 94720. *Deligne's tensor categories and classical Lie superalgebras*. Preliminary report.

Deligne's categories $\text{Rep GL}(t)$ and $\text{Rep O}(t)$ are Karoubian tensor categories generated by one object and satisfying natural universality conditions. When t is not an integer Deligne's categories are semisimple. For integral t there exist natural functors from Deligne's categories to the categories of representations of the classical Lie supergroups $\text{GL}(m,n)$ and $\text{OSP}(m,n)$ with $t=m-n$.

We use representation theory of classical supergroups to construct new abelian tensor categories and fully faithful tensor functors from Deligne's categories to these abelian categories. We also discuss a new universal tensor category related to the strange Lie superalgebra $P(n)$. (Received July 29, 2014)