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Dimitar Grantcharov, Ivan Penkov and **Vera Serganova*** (serganov@math.berkeley.edu),
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direct limits of classical superalgebras.*

We consider modules over classical Lie algebras and superalgebras (such as $\mathfrak{sl}(V)$ and $\mathfrak{osp}(V)$ where V is an infinite-dimensional (super) vector space) satisfying the following conditions:

- (1) modules are semisimple over a fixed Cartan subalgebra;
- (2) Multiplicities of weight spaces are bounded.

We classify simple modules satisfying these properties and describe extensions between them. In particular, we show that almost all simple bounded weight modules are multiplicity free and can be obtained as pull backs of modules over Clifford and Weyl (super) algebras in infinitely many variables. (Received January 19, 2021)