Maria Gorelik and Dimitar Grantcharov* (grandim@uta.edu), Department of Mathematics, UT Arlington, Arlington, TX 76019. *Bounded highest weight modules of orthosymplectic Lie superalgebras. Preliminary report.

With the aid of twisted localization, the classification of all simple weight modules with finite weight multiplicities over a classical Lie superalgebra $\mathfrak{g}$ can be reduced to the classification of all simple bounded highest weight modules of $\mathfrak{g}$. In this talk we will discuss our recent joint work with M. Gorelik where we complete the latter classification. We will discuss in detail the last open case, namely when $\mathfrak{g}$ is an orthosymplectic Lie superalgebra. (Received January 26, 2019)