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D Grantcharov* (grandim@uta.edu), Department of Mathematics, UT Arlington, Arlington, TX 76019, and **Vera Serganova**. *On the category of bounded weight modules of $\mathfrak{sl}(n)$* . Preliminary report.

We study the category \mathcal{B} of bounded weight $\mathfrak{sl}(n)$ -modules, i.e. modules that equal the direct sum of their weight spaces and whose sets of weight multiplicities are uniformly bounded. The simple objects of \mathcal{B} have been classified by O. Mathieu in 2000. The study of the indecomposable objects of the blocks \mathcal{B}^χ depends on the type of the central character χ . In this talk we focus on the case of a singular central character χ where interesting relations with layered-type graphs are discovered. (Received September 13, 2010)