1033-18-147 Leonard L Scott^{*}, Department of Mathematics, Kerchof Hall, The University of Virginia, Cabell Drive, Charlottesville, VA 22903. Semistandard filtrations in highest weight categories.

A definition of semistandard filtration of an object in a highest weight category is given, assuming finiteness of the indexing weight set and of all composition series in the latter category. These filtrations are studied especially in maximal submodles of standard modules, and their behavior under exact functors, such as translation to a wall in an algebraic groups setting, is examined. Some applications are given to extension groups for irreducible modules. (Received September 08, 2007)