1077-17-63 **Rebecca L. Jayne*** (jayne.rebecca@gmail.com), Washington College, 300 Washington Ave., Chestertown, MD 21620, and **Kailash C. Misra** (misra@math.ncsu.edu), Department of Mathematics, North Carolina State University, Box 8205, Raleigh, NC 27606. *Maximal weights and multiplicities of certain $\widehat{sl}(n)$-modules.*

Consider $V(\Lambda)$, the integrable highest weight $\widehat{sl}(n)$-module of highest weight Λ. The maximal weights are those that, when we consider the weight structure of $V(\Lambda)$, form something like a roof; the rest of the weights occur on strings stemming from the maximal weights. It is known that the set of maximal dominant weights of $V(\Lambda)$ is finite. We give explicit descriptions of maximal dominant weights for certain Λ and examine the multiplicities of particular maximal dominant weights. To determine these multiplicities, we use combinatorial objects called extended Young diagrams. We discuss a relationship between multiplicity and avoiding permutations and exhibit this relationship for some low rank cases. (Received July 15, 2011)