Corina Calinescu, Antun Milas and Michael Penn* (michael.penn@coloradocollege.edu), Department of Mathematics & Computer Science, Colorado College, 14 East Cache La Poudre St., Colorado Springs, CO 80903. Vertex Algebraic Structure of Principal Subspaces of Basic $A^{(2)}_{2n}$-Modules.

We derive presentation of principal subspaces of basic $A^{(2)}_{2n}$-modules. By using certain difference equations, we prove that their characters are given by certain Nahm sums coming from the tadpole Dynkin diagram $T_n = A_{2n}/\mathbb{Z}_2$. An evidence for modularity of these Nahm sums is also presented. (Received September 20, 2015)