Bin Wang and Xinyun Zhu* (zhu_x@utpb.edu), Xinyun Zhu, Department of Mathematics, UTPB, Odessa, TX 79762. Whittaker Modules for a Lie Algebra of Block Type.

In this paper, we study Whittaker modules for a Lie algebras of Block type. We define Whittaker modules and under some conditions, obtain a one to one correspondence between the set of isomorphic classes of Whittaker modules over this algebra and the set of ideals of a polynomial ring, parallel to a result from the classical setting and the case of the Virasoro algebra (Received September 01, 2009)