## 1046-17-1546 Sandeep Bhargava\* (bhargava@uwindsor.ca). Intersection Matrix Algebras. Preliminary report.

We look at  $BC_r$ -graded intersection matrix algebras that arise from multiply affinizing a Cartan matrix of a complex finite dimensional simple Lie algebra. The process is analogous to and extends the construction of an affine Kac-Moody Lie algebra. We will also examine the coordinate algebras that arise in the realizations of these intersection matrix algebras. (Received September 16, 2008)