1035-17-476 Sandeep Bhargava* (sbhargav@mathstat.yorku.ca). Realizations of intersection matrix algebras. Preliminary report.

An intersection matrix (i.m.) algebra is the quotient of a generalized intersection matrix (g.i.m.) algebra by the ideal generated by root spaces corresponding to roots having length greater than two. G.i.m. algebras are Lie algebras constructed much in the same way that Kac-Moody algebras are except that we weaken the requirement that off-diagonal entries in the generalized Cartan matrix be non-positive. We study the relation between i.m. algebras arising from multiply affinized Cartan matrices and central extensions of certain BC-graded Lie algebras. (Received September 08, 2007)