1033-17-140   **Sandeep Bhargava*** (`sbhargav@mathstat.yorku.ca`). *Grading intersection matrix algebras.* Preliminary report.

Generalized intersection matrix algebras are Lie algebras formed by weakening the requirement that the off-diagonal entries in a generalized Cartan matrix be non-positive. We are primarily interested in quotient algebras of such Lie algebras called intersection matrix (i.m.) algebras. We present surjective homomorphisms from i.m. algebras to symplectic or orthogonal Lie algebras and look at ways to induce the natural root grading of the image algebra back onto the i.m. algebra. (Received September 08, 2007)