1049-90-139 **Egon Balas*** (eb17@andrew.cmu.edu), Carnegie Mellon University, Tepper School of Business and, Department of Mthematical Sciences, Pittsburgh, PR 15213. *Intersection cuts from maximal lattice-free convex sets and lift-and-project cuts from multiple-term disjunctions.*

Intersection cuts from maximal lattice-free convex sets have recently been investigated with a view of deriving cuts simultaneously from multiple rows of a simplex tableau. We examine the relationship of these cuts to disjunctive cuts and lift-and-project cuts from multiple-term disjunctions. In the case of 0-1 mixed-integer programs, the cuts from maximal q-dimensional lattice-free convex sets are dominated by cuts from q-term disjunctions, which in turn are rank q split cuts. For a general mixed integer program with feasible set PI and its linear programming relaxation P, we define the disjunctive relaxation PD(v) at a fractional vertex v of P as the set of points satisfying all disjunctions that exclude v but no integer point, and the disjunctive hull at v as conv(PD(v)). We examine the relation between the disjunctive hull, the corner polyhedron and the integer hull, and give conditions for a facet defining inequality for the disjunctive hull to be facet defining for the integer hull. (Received March 01, 2009)