ERIC FREEMAN, Carleton University, 4302 Herzberg Laboratories, Ottawa, Ontario K1S 5B6 Systems of cubic diophantine inequalities

We consider systems of cubic Diophantine inequalities. In particular, we have that if s is any integer with $s \ge (10R)^{\gamma}$, where $\gamma = (10R)^5$, then given any R real cubic forms C_1, \ldots, C_R in s variables, there is a nonzero integral solution **x** of the simultaneous Diophantine inequalities $|C_1(\mathbf{x})| < 1, |C_2(\mathbf{x})| < 1, \ldots, |C_R(\mathbf{x})| < 1$.