1057-41-172   **L Bos*** (`lpbos@math.ucalgary.ca`). *Multivariate Polynomial Inequalities and Near Optimal Points for Polynomial Interpolation.*

We discuss Markov type inequalities on the derivatives of multivariate polynomials and their relation to the spacing of near optimal points for polynomial interpolation, such as the so-called Fekete and Leja points. We also discuss some efficient procedures for the computation of what we call Approximate Fekete points, as well as for discrete versions of Leja points. (Received January 21, 2010)