1020-90-120 Mohammed Shakil (mshakil@mdc.edu), Department of Mathematics, Miami Dade College, Hialeah Campus, Hialeah, FL 33012, and Jai N Singh* (jsingh@mail.barry.edu), Department of Mathematics, 11300 NE 2nd Ave, Miami Shores, Miami, FL 33161. A Variant of Primal-Dual Interior-Point Method for Linear Programming based on Kernel Functions.

Interior point methods for linear programming consist of essentially two steps; with the first step a search direction is chosen, while with the second, the steplength is determined. In this paper we present a variant of primal-dual interior-point method for linear programming whose search direction is based on recently introduced kernel function(s). (Received August 22, 2006)