TAMÁS TERLAKY, Lehigh University, Bethlehem, PA A Polynomial Column-wise Rescaling von Neumann Algorithm

Recently Chubanov proposed a method which solves homogeneous linear equality systems with positive variables in polynomial time. Chubanov's method can be considered as a column-wise rescaling procedure. We adapt Chubanov's method to the von Neumann problem, and so we design a polynomial time column-wise rescaling von Neumann algorithm. This algorithm is the rst variant of the von Neumann algorithm with polynomial complexity. Joint work with Dan Li and Kees Roos.