## LEN BOS, University of Calgary, Calgary, Alberta Metrics Associated to Polynomial Inequalities

Suppose that K is a compact subset of  $\mathbb{R}^n$ . We discuss a number of metrics on K that are closely related to Markov-Bernstein type inequalities on the derivatives of polynomials, as well as to the Siciak-Zahariuta extremal function for K as a subset of  $\mathbb{C}^n$ . We also discuss some conjectured relations between these metrics and the distribution of extremal point sets such as Fekete points.