

DREXEL ANALYSIS SEMINAR

November 10, 2023

12-1 PM, Korman 245

**Speaker:** Anatolii Grinshpan (Drexel)

**Title:** Obrechhoff's inequality

**Abstract:** Let  $p(z)$  be a polynomial of degree  $d$  with nonnegative coefficients. Obrechhoff (1923) proved that, for every  $0 < \alpha < \pi/2$ , the number of zeros of  $p(z)$  in the sector  $\{z \neq 0 : |\text{Arg}(z)| \leq \alpha\}$  is at most  $2\alpha d/\pi$ . Following A. Eremenko and A. Fryntov (Proceedings of the AMS, 2015), we will discuss this result from a potential-theoretic perspective.