1172-41-45 **Gökalp Alpan*** (gokalp.alpan@math.uu.se), Uppsala University, Sweden. *Extremal polynomials on a Jordan arc.*

Let Γ be a C^{2+} Jordan arc, ρ be a weight function which satisfies the Szegő condition and μ be a finite Borel measure in the Szegő class $\mathrm{Sz}(\Gamma)$. We discuss upper and lower bounds for

$$\lim_{n\to\infty} \frac{\|P_n\|_{L_2(\mu)}}{\mathrm{Cap}(\Gamma)^n} \tag{1}$$

where P_n is the n-th monic orthogonal polynomial for μ.

Let T_n be the n-th weighted Chebyshev polynomial with respect to ρ. Widom (1969), gave an upper bound for the quantity

$$\limsup_{n\to\infty} \frac{\|\rho T_n\|_\Gamma}{\mathrm{Cap}(\Gamma)^n}. \tag{2}$$

We state several sufficient conditions on Γ which leads to a smaller upper bound for the above quantity. (Received August 11, 2021)