FROM POLYNOMIAL APPROXIMATION TO UNIVERSAL TAYLOR SERIES AND BACK AGAIN

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ABSTRACT. Let Ω be a simply connected domain in the complex plane with $0 \in \Omega$. It is well known that results on polynomial approximation may be used to prove the existence of functions in $H(\Omega)$ such that the sequence (s_n) of the partial sums of the Taylor expansion around 0 has universal approximation properties outside Ω. On the other hand, such universal approximation of (s_n) implies that certain subsequences $(s_{n_k})_k$ approximate f in Ω. The talk focusses on this interplay.