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Catherine Beneteau, Myrto Manolaki* (mmanolaki@usf.edu) and **Daniel Seco**. *Optimal polynomial approximants: limiting behaviour on the unit circle*. Preliminary report.

The notion of optimal polynomial approximants to reciprocals of functions in Dirichlet-type spaces \mathcal{D}_α was introduced to investigate the phenomenon of cyclicity. In particular, if p_n are the optimal polynomial approximants of order n to $1/f$ and the Dirichlet norm $\|p_n f - 1\|_\alpha$ tends to 0 as $n \rightarrow \infty$, we can conclude that f is cyclic in \mathcal{D}_α . In this talk, focusing on the specific case of Hardy space, we will discuss some results and questions about the limiting behaviour of (p_n) on subsets of the unit circle. (Received February 06, 2018)