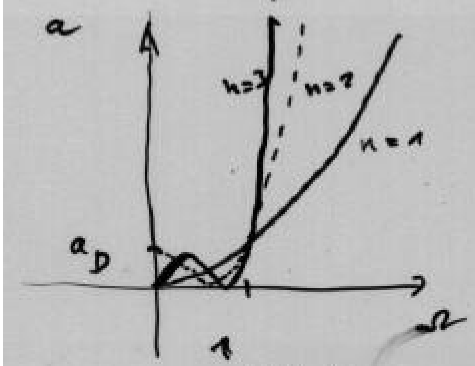
Tschebyscheff



n-te Ordg
n rel.-Extrema im D.B.

$$H(\Omega) = \frac{1}{\sqrt{1+\varepsilon^2 T_n^2(\Omega)}} \xrightarrow{\Omega \gg 1} \frac{1}{\Omega^n}$$

n	$T_n(\Omega)$
1	Ω
2	$2\Omega^2-1$
3	$4\Omega^3-3\Omega$
4	$8\Omega^4-8\Omega^2-1$
5	$16\Omega^5-20\Omega^3+5\Omega$
⋮	

allg. $$T_n(\Omega) = \begin{cases} \cos(n \arccos \Omega) & \Omega \le 1 \\ \cosh(n \operatorname{Arcosh} \Omega) & \Omega \ge 1 \end{cases}$$

Pole von $H(P)$ sind Nullst. von $1+\varepsilon^2 T_n^2(\Omega) = 0$

Ellipsen