

Thomas Ransford, **Eigenvalues and power growth**, *Israel J. Math.*, 146 (2005), 93–110.

**Abstract**

Let  $X$  be a complex Banach space and let  $T$  be a bounded linear operator on  $X$ . Denote by  $\sigma_p(T)$  the point spectrum of  $T$  and by  $\mathbf{T}$  the unit circle. We investigate how the growth of the sequence  $\|T^n\|$  is influenced by the size of the set  $\sigma_p(T) \cap \mathbf{T}$  and by the geometry of the space  $X$ . We also prove analogous results for  $C_0$ -semigroups  $(T_t)_{t \geq 0}$ .