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**MICHEL CROUZEIX**, Université de Rennes 1, Campus de Beaulieu, 35042 Rennes cedex, France  
*Some estimates for non self-adjoint operators*

Spectral theory is a very efficient tool for estimating functions of a self-adjoint operator, but the situation is much more difficult if we consider non-normal operators. We present some remarks which have been of use to us and illustrate them by the following result:

$$\|A\| \leq R \text{ and } \|A^{-1}\| \leq r^{-1} \text{ implies } \|f(A)\| \leq 3.2 \max_{r \leq |z| \leq R} |f(z)|,$$

for all bounded rational functions  $f$  in the annulus  $\{z ; r < |z| < R\}$ .