

Exercises

11.38 [11N] If $A \in \mathbb{C}^{m \times n}$ we can define the induced norms

$$\|A\|_{p,q} \stackrel{\text{def}}{=} \max_{x \in \mathbb{C}^n, |x|_p \leq 1} |Ax|_q \quad . \quad (11.38)$$

Show that $\|A\|_{p,q} = \|\bar{A}\|_{p,q}$.