A closed subalgebra of a C^*-algebra that isn't self-adjoint.

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The disc algebra $\mathcal{A}(\Delta)$ [1] is a closed subalgebra of the C^*-algebra $C(\Delta)$. If f and $\bar{f}$ both belong to $\mathcal{A}(\Delta)$, then by the Cauchy-Riemann equations f will be constant. So $\mathcal{A}(\Delta)$ isn't self-adjoint.

[1] (VIII) Let Δ denote the closed unit disc $\{z \in \mathcal{C}, |z| \leq 1\}$. Suppose that $A(\Delta)$ denoted the set of all elements of $C(\Delta)$ which are analytic on the interior of Δ. $A(\Delta)$ is a closed subalgebra of $C(\Delta)$.