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Relative annihilators and relative commutants

If \mathcal{A} is an algebra of operators acting on a Hilbert space \mathcal{H} , and if \mathcal{S} is a subspace of \mathcal{A} , the *relative commutant* of \mathcal{S} in \mathcal{A} is the set $\mathcal{S}^\dagger = \{T \in \mathcal{A} : TS = ST \text{ for all } S \in \mathcal{S}\}$. The *relative annihilator* of \mathcal{S} is $\mathcal{S}^\circ = \{T \in \mathcal{A} : TS = 0 = ST\}$ for all $S \in \mathcal{S}$. In this talk we shall discuss the relationship between these two notions for certain weak-operator closed subspaces of nest algebras.