ON SPECTRAL RADIUS ALGEBRAS

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Abstract. We show how one can associate a Hermitian operator $P$ to every operator $A$, and we prove that the invertibility properties of $P$ imply the non-transitivity and density of the spectral radius algebra associated to $A$. In the finite dimensional case we give a complete characterization of these algebras in terms of $P$. In addition, we show that in the finite dimensional case, the spectral radius algebra always properly contains the commutant of $A$.

Key words and phrases: Spectral radius algebras, invariant subspaces, operators on finite dimensional spaces.

REFERENCES