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*72T-D141. CHARLES F. DUNKL and DONALD E. RAMIREZ, University of Virginia, Charlottesville, Virginia 22903. Weakly sequentially complete function algebras.

Theorem. If a function algebra A (possibly without a unit) is weakly sequentially complete, then it is finite dimensional. Proof. We may assume A is separable, and so the Shilov boundary ∂A is metrizable. By the Lebesgue dominated convergence theorem and the weak sequential completeness, the characteristic function of any peak point in A . Similarly, the characteristic function of any denumerable set of peak points is also in A . Thus the set of peak points is finite and so equals ∂A . (This result is based on a method of N. E. Edwards,

Proc. Amer. Math. Soc. 5(1954), 71-76.) Remark. Convolution measure algebras are examples of weakly sequentially complete algebras. (Received March 6, 1972.)