962-40-1431 Arthur A Danielyan* (adaniely@pegasus.cc.ucf.edu), Department of Mathematics, University of Central Florida, P.O. Box 161364, Orlando, FL 32816. On the convergence of functions defined on compact Hausdorff speces.

Suppose S is a compact Hausdorff topological space, C(S) is the Banach space of all complex continuous functions on S with the supremum norm, and A is a closed subspace of C(S). Let f be a function defined on S. We discuss the problem of the representation of f by a sequence (u_n) of elements of A, such that the sequence (u_n) is uniformly bounded $(||u_n|| < M, M > 0)$, and converges to f at each point of S. We present an important application of the solution of this problem. (Received October 05, 2000)