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Hueytzen J. Wu* (kfhjw00@tamuk.edu), Department of Mathematics, MSC 172, Texas A & M University - Kingsville, Kingsville, TX 78363, and **Wan-Hong Wu**. *Generalized Stone-Weierstrass Theorem for $C^*(Y)$.*

Let $C^*(Y)$ be the set of all bounded real continuous functions on a topological space Y with the supremum norm. Let R be the equivalence relation on the set S of all $C^*(Y)$ -nets defined by $[x_i] R [x_j]$ iff $\lim[f(x_i)]$ is equal to $\lim[f(x_j)]$ for all f in $C^*(Y)$. Let $[x_i]^*$ be the equivalence class containing the $C^*(Y)$ -net $[x_i]$. Theorem A vector sublattice V of $C^*(Y)$ is dense in $C^*(Y)$ with the supremum norm iff (1) For two different equivalence classes $[x_i]^*$ and $[x_j]^*$, there is an f in V such that $\lim[f(x_i)]$ is not equal to $\lim[f(x_j)]$; (2) For each $[x_i]^*$ and each positive real number t , there exists a g in V such that $1 - \lim[g(x_i)]/[g]$ is less than t , where $[g]$ is the supremum norm of g . (Received September 12, 2014)