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Gregory Budzban* (gbudzban@math.siu.edu), Department of Mathematics, Southern Illinois University, Carbondale, IL 62901, and **Goran Hognas**. *The Minimal Ideal of the Semigroup of Probability Measures on a Compact Semigroup with applications to Random Measures.*

Given a compact semigroup S , it is well known that the set $P(S)$ of probability measures on S is itself a compact semigroup under convolution. In this presentation, the structure of the minimal ideal of $P(S)$ will be determined. This structure theorem will then be utilized to find conditions for the convergence in distribution of products of independent random variables taking their values in $P(S)$. (Received January 14, 2009)