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**Benjamin P Russo\*** (russobp@farmingdale.edu) and **Arthur Parzygnat**  
(arthur.parzygnat@uconn.edu). *C\*-algebras and the Category of Stochastic Maps.*

Stochastic maps are a generalization of functions in that they assign to each point in the domain a probability measure of on the codomain. In this talk we will discuss the category of stochastic maps. In particular, we will explore some generalizations of probabilistic concepts resulting from the existence of a contravariant functor from the category of stochastic maps into the category of  $C^*$ -algebras. This is joint work with Arthur Parzygnat (UConn). (Received September 10, 2018)