

Establishing the proposed methodology in previous sections over safety verification of an unknown stochastic system ~~arises~~ immediately raises this question: "Is it doable/feasible to synthesize a controller for the stochastic system for the sake of safety specification solely based on collected data?" The answer to this question is not easy generally, but we provide an algorithm in this section which wisely seeks ~~for~~ a controller through collected data. It is assumed that inputs live in an infinite continuous set and a fixed structure is considered for the controller. This structured controller is incorporated into the robust convex program which is built based on a control safety problem.