THE SOLUTION OF AN INTEGRAL **EQUATION VIA** MONTE CARLO SIMULATION

Ileana POPESCU University of Bucharest, Faculty of Mathematics, Dept. of Computer Science, 14, Academiei St., RO-70109 Bucharest, Romania, Email: ileanap@fx.ro

Abstract

In this paper we investigate a class of estimators for the solution of integral equations. We provide sufficient conditions for this class of estimators to be unbiased. Estimators will be derived by simulating stochastic systems with complete connections.

Keywords: Monte Carlo methods, integral equation, stochastic systems with complete connections.

AMS Classification: 65C05, 65R20.