

ON UNIFORM OBSERVABILITY OF LINEAR DISCRETE-TIME
STOCHASTIC SYSTEMS

Viorica Mariela UNGUREANU

Abstract. We consider the linear discrete-time systems with independent random perturbations in Hilbert space. We obtain a necessary and sufficient conditions for the uniform exponential stability of the uniformly observable systems in terms of Lyapunov equations

MSC2000: 30A11, 60G51.

Keywords: uniform exponential stability, uniform observability, Lyapunov equation.