

**ERGODIC THEORY FOR ENDOMORPHISMS OF P^k :CENTRAL
LIMIT AND LARGE DEVIATION THEOREMS**

NESSIM SIBONY

Exponential estimates for plurisubharmonic functions with respect to Lebesgue measure are classical .We prove similar estimates for plurisubharmonic functions with respect to Monge-Ampère measures with Hölder continuous potential. As an application, we obtain several stochastic properties for the equilibrium measures associated to holomorphic maps on projective spaces. More precisely, we prove the exponential decay of correlations, the central limit theorem for general d.s.h. observables(differences of quasi p.s.h functions), and the large deviations theorem for bounded d.s.h. observables and Hölder continuous observables. If time permits we will indicate the connection with the theory of superpotentials. This is joint work with T.C Dinh and V.A.Nguyen.