1079-60-146 **Adina Oprisan*** (aoprisan@mail.barry.edu), Barry University, Department of Mathematics and Computer Scienc, 11300 NE 2nd Avenue, Miami Shores, FL 33161, and **Andrzej Korzeniowski**. *Large deviations for additive functionals of Markov processes.*

We consider additive functionals of Markov processes of the form $S(t) = \int_0^t f(X_s)\,ds$ and prove that the functional central limit theorem for additive functionals of Markov processes (Bhathacharya, 1982) admits an almost sure version based on empirical measures with logarithmic average associated with the additive functionals $\frac{1}{\sqrt{n}} \int_0^{nt} f(X_s)\,ds$. We further prove a Donsker-Varadhan type of large deviation principle for these empirical measures and show that the rate function coincide with the rate function for the empirical measures associated with a Wiener process. Examples, including the Ornstein-Uhlenbeck process, are provided. (Received January 09, 2012)