1086-VI-519   **Martial Longla*** (`longla_m_martial@yahoo.com`), 203 Erkenbrecher Ace, Apt 2, Cincinnati, OH 45229, and **Costel Peligrad** and **Magda Peligrad**. *On Functional CLT for reversible Markov chains with nonlinear growth of the variance of partial sums.*

In this paper we study the functional central limit theorem for stationary Markov chains with self-adjoint operator and general state space. We investigate the case when the variance of the partial sum is not asymptotically linear in n, and establish that conditional convergence in distribution of partial sums implies functional CLT. The main tools are maximal inequalities that are further exploited to derive conditions for tightness and convergence to the Brownian motion. (Received September 05, 2012)