1054-37-294 **Huyi Hu*** (hu@math.msu.edu), Department of Mathematics, Michigan State University, East Lansing, MI 48824, and **Sandro Vaienti** (vaienti@cpt.univ-mrs.fr), Centre de Physique Theorique, Luminy Case 907, F-13288 Marseille, Cedex 9, France. *Decay of correlations for some nonuniformly expanding maps.* Preliminary report.

We study decay of correlations for some nonuniformly expanding maps that do not have a Markov partition. We apply the results of Sarig and Guoezel, and obtain that if Losota-Yorke inequality is satisfied for reduced systems, then under some general conditions on the systems, one can get polynomial decay of correlations. The results can be applied to one dimensional maps with an indifferent fixed point. (Received September 15, 2009)