1077-VE-1317 **Veera Holdai*** (`vxholdai@salisbury.edu`), Salisbury University. *Detection of slightly expressed changes in random environment.*

Consider a regular parametric family of distributions $F(\cdot, \theta)$. The classical change point problem deals with observations corresponding to $\theta = 0$ before a point of change, and $\theta = \mu$ after that. We substitute the latter constant μ by a set of random variables $\theta_{i,n}$ called a random environment assuming that $E[\theta_{i,n}] = \mu_n \to 0$. The random environment can be independent or obtained by random permutations of a given set. We define the rates of convergence and give the conditions under which the classical parametric change point algorithms apply. (Received September 19, 2011)