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J. Ding* (jiu.ding@usm.edu), Department of Mathematics, University of Southern Mississippi, Hattiesburg, MS 39406, and **Tulsi Upadhyay**. *A maximum entropy method for stationary densities of random maps.*

For a random map consisting of a finite number of transformations with respective probabilities, we develop a maximum entropy method for the recovery of a stationary density of the corresponding Markov operator. Convergence analysis and numerical results are presented. (Received August 22, 2017)