

STRONG CONSISTENCY OF MLE FOR FINITE UNIFORM MIXTURES WHEN THE SCALE PARAMETERS ARE EXPONENTIALLY SMALL

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Abstract. We consider maximum likelihood estimation of finite mixture of uniform distributions. We prove that maximum likelihood estimator is strongly consistent, if the scale parameters of the component uniform distributions are restricted from below by $\exp(-n^d)$, $0 < d < 1$, where n is the sample size.

Key words and phrases: Mixture distribution, maximum likelihood estimator, consistency.