

ESTIMATION OF THE SCALE PARAMETER OF A POWER LAW PROCESS USING POWER LAW COUNTS

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Abstract. Analogous to Kingman's Poisson Counts, power law counts are defined. Further, these are used to obtain the maximum likelihood estimator of the scale parameter of a power law process. Comparison of this estimator is done with those obtained by using other sampling schemes. Also, cost comparisons are done under the assumption of equal asymptotic variances under different sampling schemes.

Key words and phrases: Poisson sampling, power law process, power law counts, power law process sampling.