Graduate

PROBABILITY SEMINAR

Minimal sufficient statistics in location-scale parameter models

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Abstract. Let f be a probability density on the real line, let n be any positive integer, and assume that $\log f$ is locally integrable with respect to Lebesgue measure. Mattner [5] proved that either $\log f$ is almost everywhere equal to a polynomial of degree less than n, or the order statistic of n independent and identically distributed observations from the location-scale parameter model generated by f is minimal sufficient. In this seminar, we will discuss about this main result and some consequences of it.

References

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