
Erratum

Monotone Decrease of Characteristic Functions

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Received June 30, 1977

The hypotheses of the theorem in my paper⁽¹⁾ are incorrectly stated. I thank Mark Pinsky for pointing this out to me.

Let ρ denote the probability measure associated with the n -dimensional distribution function $F(x)$; i.e., for any Borel set $A \subseteq R^n$, we define

$$\rho(A) = \int_A dF(x)$$

Then hypotheses (1a) and (1b) should read as follows:

$$\rho \text{ is symmetric} \quad (1a)$$

$$\int (t \cdot x)^2 dF(x) > 0, \quad \text{all } t \in R^n, \quad t \neq 0 \quad (1b)$$

Hypothesis (1a) implies that the characteristic function $f(t) = \int \exp(it \cdot x) dF(x)$, $t \in R^n$, is real-valued.⁽²⁾ Also, in order to avoid any confusion, the last sentence in the theorem should read as follows: "Thus, in a suitable neighborhood of the origin, f is monotonically decreasing along rays starting at the origin."

REFERENCES

1. R. S. Ellis, *J. Stat. Phys.* **16**:117 (1977).
2. K. L. Chung, *A Course in Probability Theory* (Harcourt, Brace, and World, New York, 1968), p. 145.

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