Contents

1 Gaussion Distribution

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The following function defined on the real line

$$f(x) = \frac{1}{\sqrt{2\pi}\sigma} \exp\left\{-\frac{(x-\mu)^2}{2\sigma^2}\right\}$$
 (1)

1

is called the probability density function (pdf) of a normal distribution with mean μ and variance σ^2 . \cdots The equation ((1)) on page 1 of Section 1 is called standard normal pdf if $\mu = 0$ and $\sigma = 1$.

Billingsley's [1, see Chapter 5] book was published in New York (See also Kartzas and Shereve [3, Optional]). Harrison and Reiman [2] have a paper in The Annals of Probability.

References

- [1] Billingsley, P. (1968) Convergence of Probability Measures John Wiley & Sons, New York.
- [2] Harrison, J. M. and Reiman, M. I. (1981). Reflected Brownian Motion on an Orthant *The Annals of Probability* 9, 302–308.
- [3] Karatzas, I. and Shereve, S. (1988) Brownian Motion and Stochastic Calculus Springer-Verlag, New York.