

Temporal Characteristics of Random Processes

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Based on
Probability, Random Variables and Random Signal Principles,
P.Z. Peebles,Jr. and B. Shi

Outline

1 Joint Distributions, Independence, and Moments

First Order Distribution Function

N Gaussian random variables

Definition

For one particular time t_1 , the distribution function associated with the random variable $X_1 = X(t_1)$

$$F_X(x_1; t_1) = P\{X(t_1) \leq x_1\}$$

