

**Definition 0.0.1** (Gaussian process). A stochastic process  $(X_t)_{t \geq 0}$  is said to be a Gaussian process, if for arbitrary times  $0 < t_1 < t_2 < \cdots < t_n$ , the vector  $(X_{t_1}, \dots, X_{t_n})$  follows a multivariate Gaussian distribution.