

**Definition 0.0.1** (“equality” of stochastic processes). Two processes  $X$  and  $Y$  defined on a common probability space are said to be

- (stronger) **indistinguishable** if the event  $\{X_t = Y_t, \text{ for all } t \in [0, T]\}$  has probability 1, i.e.  $\mathbb{P}(\bigcap_t \{X_t = Y_t\}) = 1$ .
- (weaker) **modifications** of each other if for all  $t \geq 0$ ,  $\mathbb{P}(X_t = Y_t) = 1$ .