

# Sampling and Monte Carlo Simulations

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# Nondeterminism

## **Causal nondeterminism:**

Not every event is caused by previous events

## **Predictive nondeterminism:**

Lack of knowledge about the world makes it impossible make accurate predications about future states

# Stochastic Processes

An ongoing process where the next state might depend on both the previous states **and some random element**.

# Rolling a Die

```
def rollDie():  
    """returns an int between 1 and 6"""
```

```
def rollDie():  
    """returns a random int between 1 and 6"""
```

