Lecture on August 6th 2018
Variations of Brownian Motion

1   Reflection Principle (See - Chap 8.2)

- Definition and distributions of hitting time τ_x.

- Theorem on the probability of a standard Brownian Motion crossing time-axis.

2   Reflected Brownian Motion (See - Chap 8.3.1)

- Definition of Reflected Brownian Motion.

- Mean, Variance, Transition probability density of Reflected Brownian Motion.

3   Absorbed Brownian Motion (See - Chap 8.3.2)

- Definition of Absorbed Brownian Motion.

- Transition probability density of Absorbed Brownian Motion.

4   Brownian Bridge (See - Chap 8.3.3)

- Definition of Brownian Bridge

- Mean, Variance of Brownian Bridge.