Lecture on August 6th 2019 Variations of Brownian Motion

1 Reflection Principle (See - Chap 8.2)

• 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.