ESD. 71 Recitations – Recitation 4
Prepared by Michel-Alexandre Cardin

Content
- General questions on class material
- Application portfolio
  o Discuss AP2 assignment and questions
  o Explain why we use exponential form as assumption for function in GBM model:

From Taylor series expansion:
\[ e^r = \sum_{n=0}^{\infty} \frac{r^n}{n!} = 1 + r + \frac{r^2}{2!} + \frac{r^3}{3!} + \ldots \approx 1 + r, \text{ if } r << 1 \]

Also, we often model price (or value) as \( S(t) = S_0 (1 + r)^t \)
\[ \Rightarrow S(t) = S_0 (1 + r)^t = S_0 e^{rt} \]

- Show Best fit to data example to characterize uncertainty, extract trend form from data, and volatility parameter

- Exercises
  o 2.4 and show production function visualization Excel spreadsheet
  o 4.13 and if time, 4.3

Tasks
- Review AP2
- Review production function visualization spreadsheet to understand mechanics
- Review all exercises above