

# Structuring and Valuation

## Class 1

### Aufgabe 1

- Proof Black's formula!

### Aufgabe 2

- Find the dynamics of the log-spot price in the Schwartz model!

$$S_t = \exp \left( \ln(S_0)e^{-\kappa t} + \ln(\theta)(1 - e^{-\kappa t}) + \sigma \int_0^t e^{-\kappa(t-s)} dW_s \right)$$

### Aufgabe 3

- Find the dynamics of the futures in the Schwartz model!