Recall 11

Consequence of Dupire's formula

- 1. How do you use Dupire's formula in practice?
- 2. What is the relation between local and implied volatility?
- 3. What is the log-moneyness? Why is it is more convenient to work with the log-moneyness instead of the strike? What is the short maturity formula of the implied volatility and how do you get it?
- 4. What are the advantages and the limitations of local volatility models?

Stochastic volatility models

- 1. What is a stochastic volatility model?
- 2. Which is the PDE that must follows an option price under a stochastic volatility model?
- 3. What is the Heston model? What you can say about it?
- 4. What is the SABR model? What you can say about it?