

## Stochastic calculus and PDEs in financial applications

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### Abstract

This crash course covers the basic theory of Ito calculus, stochastic differential equations and PDEs with an eye to financial applications. Topics include Brownian integration, SDEs and Feynman-Kac theorems, numerical methods. Throughout the course applications to problems from option pricing and volatility modeling are provided.

### schedule

3-February-2022 14-16

4-February-2022 9-11

9-February-2022 14-16

10-February-2022 9-11

### technical information

The course will be held only online with a streaming on teams. Interested students should write to [andrea.pascucci@unibo.it](mailto:andrea.pascucci@unibo.it)