UNIVERSITÀ DEGLI STUDI DI TORINO

ID

TIC48_DIP_MAT

Visiting Professor Program
Academic year 2021/2022

DEPARTMENT OF MATHEMATICS "GIUSEPPE PEANO"
TEACHING COMMITMENT: 16 hours

COURSE TITLE

Stochastic differential equations

TEACHING PERIOD
1st term

SCIENTIFIC AREA
Stochastic Analysis

LANGUAGE USED TO TEACH
English
The Degree Course is entirely taught in English

COURSE SUMMARY
Review of measure theory and probability theory, Brownian motion, the Ito stochastic integral, Ito formula, Stochastic differential equations, properties of solutions of stochastic differential equations and applications.

LEARNING OBJECTIVES
The course aims to put the student in a position to understand the mathematical formulation of various models of applied sciences and financial mathematics which involve stochastic differential equations. At the end of the course, students will know several important methods to study stochastic models; in particular they will know the Ito stochastic integral and the related stochastic differential equations. They will be able to study applications of stochastic differential equations to solve problems in applied sciences

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

N/A

OTHER ACTIVITIES BESIDES THE COURSE

N/A

VISITING PROFESSOR PROFILE

The VP will be a highly qualified scholar with an excellent track record of publications in probability and/or stochastic analysis, with special attention to the topics coherent with the course contents.

CONTACT PERSON AT THE DEPARTMENT

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