UNIVERSITÀ DI TORINO

ID

VP_148_MAT

Visiting Professor Program
Academic Year 2025/2026

TEACHING COMMITMENT: 17 hours

COURSE TITLE
Countable Borel Equivalence Relations

TEACHING PERIOD
II semester

SCIENTIFIC AREA
Mathematical Logic

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
A prominent part of modern descriptive set theory is the analysis of definable quotients of Polish spaces. The subject of "countable Borel equivalence relations" studies one of the most fundamental kinds of definable quotients. There is a beautiful interplay between this subject and other areas of mathematics such as group theory, ergodic theory, and combinatorics.

LEARNING OBJECTIVES
By the end of this course, the student will know some fundamental theorems of the theory of Borel reducibility. They will master the main techniques to analyze countable Borel equivalence relations and they will get familiar with important open problems in the subject.

OTHER ACTIVITIES BESIDE THE COURSE

VISITING PROFESSOR PROFILE

The ideal candidate will be a professor in Mathematical Logic specializing in descriptive set theory and the study of countable Borel equivalence relations, established through research publications and teaching.

CONTACT REFERENT

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