



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



DEPARTMENT OF STATISTICAL SCIENCES
PhD Course in Statistical Sciences



University of Padua PhD Course in Statistical Sciences

XLI Cycle Opening

November 7, 2025

**Padua | Department of Statistical
Sciences,
via Cesare Battisti 241 |
Room SC 140**

Course Coordinator
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The PhD Course in Statistical Sciences welcomes the new PhD students, starting their doctoral program in November 2025.

The event foresees an invited research lecture.

Invited lecture | Abstract

Space oddity? Statistics of satellite conjunction analysis

The number of satellites in low earth orbit is rapidly growing, and so is the risk of collision. Satellite engineers monitor the positions of thousands of satellites in real time, and compute so-called collision probabilities when a close conjunction of two satellites becomes likely. The talk will discuss various aspects of this problem, suggest an alternative approach based on a statistical model for conjunctions, and compare it with established ideas. The work is joint with Soumaya Elkantassi, Russell Carpenter and Matt Hejduk.

Programme

16:30 | **Welcome**

Massimiliano Caporin

Vice Director of the Department of
Statistical Sciences
University of Padua

Nicola Sartori

Coordinator of the PhD Course in
Statistical Sciences
University of Padua

16.45 | **Invited lecture**

Anthony Davison

École Polytechnique Fédérale de
Lausanne, Switzerland

***Space oddity? Statistics of satellite
conjunction analysis***

17.45 | **Cocktail**