



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DICEA
DIPARTIMENTO
DI INGEGNERIA CIVILE
E AMBIENTALE

Avviso di Seminario

Mercoledì 4 febbraio 2026

h. 15.00-16.30 – Aula Caminetto (Sede di Santa Marta)

The uncertainty principle for chaos

and

**Differential equations with a generalized
piecewise constant argument and applications**

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Abstract

Part 1: W. Heisenberg developed the famous uncertainty principle, which has profoundly impacted various fields, including science, industry, and social life. In our work on chaos research, we propose an uncertainty principle specifically for chaos, focusing on two key characteristics: alpha unpredictability and Lorenz sensitivity.

Part 2: We will explore the fundamental aspects of differential equations with a generalized piecewise-constant argument. We will compare these aspects with those of smooth ordinary differential equations, discussing a wide range of applications related to industrial and real-world problems.