



DOCTORAL PROGRAMME IN MATHEMATICAL SCIENCES

In the framework of the activities of the PhD programme in Mathematical Sciences

Prof. **Alberto Farina**

dell'Università de Picardie Jules Verne

will offer a PhD course on

**Nonlinear Elliptic PDEs in unbounded domains:
qualitative properties
and
classification**

Abstract

The goal of this course is the study and the classification of solutions to nonlinear elliptic partial differential equations. We will show some classification and rigidity results in Euclidean unbounded domains: Liouville type theorems, symmetry of solutions defined in the whole Euclidean space in N -dimensions, one-dimensional monotonicity and symmetry for positive solutions in half-spaces.

We will also discuss the optimality of the obtained results and present some open problems.

Scheduling

The course will be held at the Department of Mathematics, Via C. Saldini n.50 – Milano
with the following scheduling:

14, 16, 21, 23, 28, 30 March 2022

from **2.00 pm to 4.30 pm**

Room: Aula Dottorato (1st floor)