## An Introduction to Reaction Diffusion Equations

Benedetta Pellacci Timetable (20 hours)

The lesson will take place in Aula F of the department of Mathematics and Physics.

The course will be focused on the discussion of a class of reaction diffusion equations related to logistic models arising in biology. In the first 6 hours we will recap the basic stuff concerning functional analysis and initial value problem: well-posedness; maximum and comparison principles; long-time behavior and convergence to equilibria. The second part of the course will deal with stationary solutions: existence, multiplicity, qualitative behavior, principal eigenvalues. At last, we will give a glimpse on contemporary research topics.

## Timetable

Wednesday 21/6/2023 10-13 (3 hours), Aula F of the department of Mathematics and Physics.
Monday, 26/6/2023 10-13 (3 hours), Aula F of the department of Mathematics and Physics.
Wednesday, 28/6, 11-13 (2 hours), Aula F of the department of Mathematics and Physics.
Tuesday, 4/7, 10-12 (2 hours), Aula G of the department of Mathematics and Physics.
Thursday, 6/7, 11-13 (2 hours), Aula G of the department of Mathematics and Physics.
Monday, 10/7, 10-13 (3 hours), Aula G of the department of Mathematics and Physics.
Wednesday, 12/7, 11-13 (2 hours), Aula G of the department of Mathematics and Physics.
Monday, 17/7, 10-13 (3 hours), Aula G of the department of Mathematics and Physics.