

**Submit your work on Catcourses by March 17th at 11:59pm**

Please be aware that in this homework, your approach and your justifications will be given **a lot** more importance than your final results. This means that you should think about how you will present and explain your work so that what you turn in makes sense, even if it is read by someone unfamiliar with the problem. This is a good training for your final report project.

**Read entirely the homework assignment first !**

Groups will be randomly assigned soon (**check catcourses announcements**). In each you will have to assign:

- A group leader (manages communication within the group)
  - A work submission leader (submits the group work on behalf of the group)
1. Identify a real system that includes a quantity that may be described using random walkers, or identify a real system when randomness intervenes. Describe this system including all relevant details and citing sources when appropriate (explain how you know what you describe).
  2. Develop a model for this system using random walkers. Devise appropriate rules for the walkers to follow and justify those rules.
  3. Implement your model and compute a few realizations of your model. Describe what your model does well and what it does poorly relative to the real system.
  4. Submit all your answers **in a single .ipynb** on Catcourses your answers under the assignment **Homework 5 (group)**. The work submission leader of each group is responsible for the submission.