

"Grand Prix scientifique" 2025

Call for applications Simone and Cino Del Duca Foundation

Every year, <u>alternatively</u> under the disciplines of the two divisions⁽¹⁾ of Academy of Sciences, the Simone and Cino Del Duca Foundation of the Institut de France awards a scientific prize based on the recommendations of a jury of the Institut de France members. The "Grand Prix scientifique de la fondation del Duca" will be awarded in 2025. It rewards a French or European⁽²⁾ researcher and his/her team(3), French or European(2), working on "Matter in out-of-equilibrium conditions".

Matter can be out of equilibrium either in a non-equilibrium steady state when supplied with external energy which it dissipates or when it relaxes slowly toward a steady state. In these situations the standard results of thermodynamics and of classical and quantum equilibrium statistical mechanics are a priori invalid. Still, experiments reveal several generic features of out-of-equilibrium systems such as spontaneous organization and self-assembly, robust statistical patterns, dissipative phase transitions, non-ergodic behavor and ageing. Such effects, often spectacular and counter-intuitive, have called for more advanced theoretical descriptions, and are leading to interesting applications.

The field of out-of-equilibrium matter spans a broad spectrum of systems including "active" and biological matter, collective animal behavior, quantum many-body systems under external fields, strongly driven and turbulent systems, and granular or glassy materials.

The prize is as follows:

- a) 200,000 € to finance the work of the award-winning group,
- b) 25,000 € awarded to the director of the research group,
- c) 50,000 € (maximum amount paid upon presentation of supporting documents) towards the hiring of one French or foreign postdoctoral researcher to be selected by the group director, <u>no later than two years after the prize is awarded</u>. An activity report must be sent within two months after the end of the contract.

An agreement will be established between the laboratory and the Del Duca Foundation to define the conditions of payment.

The applications must be sent on line not later than <u>Tuesday February 18, 2025</u> <u>before midnight</u> to the following electronic address:

http://prix.academie-sciences.fr

For further informations, you can consult this call for application on the website of the French Academy of sciences at the adress below:

Call for application

The files should be written in English.

The applications must contain:

- 1) the application form, completed online (http://prix.academie-sciences.fr)
- 2) an executive summary (title of the project, abridged CV of the project head, main past scientific achievements and a short description of the research proposal, a list of 10 major publications) (2-3 pages) (completed online),
- 3) a cover letter signed by the head of the team,
- 4) the complete CV of the head of the team (2-pages maximum),
- 5) an abridged CV of team members,
- 6) a description of results obtained by the team (5-pages maximum),

- 7) a description of the research proposal and the intended use of the Grand Prix (3-5 pages).
- 8) **one or two letters of recommendation** or sponsorship of a international scientist of renown (name and contact of the personality should be completed online).

The deadline for submissions is, Tuesday February 18, 2025 before midnight.

Applications will be examined by a jury composed of members of the Academy of sciences. The jury will seek the opinion of French and foreign experts.

The *Grand Prix scientifique* will be awarded at the Institut de France, under the Dome, **on Wednesday**, **June 18, 2025.**

For any questions, please contact:

Academy of sciences

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Simone and Cino Del Duca Foundation Grand Prize for Science – Previous Years in the areas covered by this call of applications for the 1st division

2007: Pr Jacques Prost, General Director of the Industrial Physics and Chemistry Higher Educational Institution of Paris and **Pr Jean-François Joanny**, Director of the Unit of Physical Chemistry, UMR 168 CNRS- Curie Institute, for their research works on the theme "Concepts and physical techniques implemented in the following: process studies on molecules of the living".

2009: **Pr Michael Harris**, Professor of mathematics at Denis Diderot University in Paris for his research works on automorphic representations and Galois representations.

<u>2011</u>: **Pr Romain Teyssier**, Professor at the University of Zürich and Head of the Computational Astrophysics group in CEA Saclay, for his works on numerical simulations in astrophysics.

<u>2013</u>: **Pr Michel Campillo,** Professor at Joseph Fourier University of Grenoble, researcher at the institute of earth sciences in Grenoble, for his work on environmental noise for imaging earth structures and monitor their changes over time.

2015: Pr Guy Perrin, astronomer in the Laboratory of Spatial Studies and Instrumentation in Astrophysics (LESIA), for its project of study of a black hole thanks to the instrument GRAVITY, and **Pr Patrice Hello**, university professor in the Laboratory of the linear accelerator (LAL), for his research in gravitational astronomy with the network LIGO-Virgo.

<u>2017</u>: **Pr** Laurent Massoulié Director of the Microsoft Research – Inria Joint Center, for his research on Social Information Networks.

2019: **Brigitte Senut** Professor of Palaeontology, *Muséum National d'Histoire Naturelle*, Department Earth History, Paris.

<u>2021</u>: **Josselin Garnier** researcher at the Centre for Applied Mathematics (CMAP) and professor at the *École Polytechnique*.

<u>2023</u>: **Isabelle Panet** director of Research and head of the IPGP-IGN geodesy group at the Institut de Physique du Globe (IGN).