



Postdoc positions on Fickian non-Gaussian Diffusion at University of Naples Federico II, Italy

We are looking for motivated candidates to fill two postdoc positions at University of Naples Federico II, in the framework of a project entitled "*Fickian non-Gaussian Diffusion in static and dynamic environments*" (please find below a few details on the project).

- a) One position is to work primarily with Prof. Francesco Greco and myself in our group of *Statistical Mechanics of Soft Materials* (Dept. of Chemical, Materials and Production Engineering).

The postdoc will study Fickian non-Gaussian Diffusion in several soft matter systems, including glass-forming liquids, by performing simulations and numerical analysis of experimental data provided by our partners.

For a previous work on closely related topics, please see <https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.128.168001>

The candidate should have a PhD in Physics, Materials Science, Chemical/Materials Engineering or in related areas and, preferably, a background in statistical physics and/or numerical simulations and good programming skills.

- b) The other position is to work primarily in the Lab of *Laser, Spectroscopy and Optical Manipulation*, with Prof. Antonio Sasso and Dr. Giuseppe Pesce (Dept. of Physics). The postdoc will perform experiments on colloidal tracers in optical patterns, pushing forward the research activity described in this paper: <https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.126.158003>

The candidate should have a PhD in Physics, Materials Science, Chemical/Materials Engineering or in related areas and, preferably, some expertise in optics, optical manipulation, data acquisition, image analysis, programming with LabView/Matlab/Python

For both positions, the appointment is for one year (extensions of the appointments might become available). The start date is flexible, ranging between late fall 2023 and spring 2024.

Candidates who feel suited to both tasks may ask to be considered for a two-year position.

Interested candidates are encouraged to contact me directly: raffaele.pastore@unina.it. Demonstrations of interest should include a short CV. Review of applications will be by the middle of September, and continue until the positions are filled.

Project details: the project is coordinated by me as the PI, funded by the *Italian Ministry of University and Research*, and involves a team of faculties at University of Naples and University of Padova. The full team includes the above-mentioned staff at University of Naples, as well as Prof.s Manlio De Domenico, Fulvio Baldovin, Matteo Pierno, and Flavio Seno at University of Padova.

Raffaele Pastore