

Announcement of a PostDoc Position

Experimental Soft Condensed Matter Physics, Optical tweezers

The Magnetic soft Matter Group (<http://www.ecm.ub.es/~ptierno/index.html>) invites applications for a postdoctoral position to a motivated candidate with a suitable background in the field of **soft condensed matter physics** at the University of Barcelona, Spain (PI: Dr. Pietro Tierno).

The position will be associated with a recently funded project from the European Research Council, titled "ENFORCE: *ENgineering FrustratiON in aRtificial Colloidal icEs: degeneracy, exotic lattices and 3D states*". The Project's goal is to power a series of experimental research lines based on the combined use of magnetic and optical forces and targeting geometric frustration in soft matter systems, addressing both fundamental and applied issues in the field.

The candidate will be involved in one (or more) growing/running experiments. In particular, (s)he will work on one (or more) of the following topics:

- use of a preexisting laser tweezers set-up incorporating acousto-optic-deflectors to manipulate magnetic/non-magnetic particles

See the work: Antonio Ortiz-Ambriz et al. *Soft Matter* **14** 5121-5129 (2018)

- use of a preexisting experimental set-up to conduct research on transport of magnetic colloids above periodic potentials

See the work: R. L. Stoop et al. *Phys. Rev. Lett.* **124** 058002 (2020).

- Dynamics of field driven propelling magnetic swimmers

See the work: H. Massana-Cid et al. *Nat. Commun.* **10**, 2444 (2019).

The postdoc will have the possibility of mentoring undergraduate students, and to teach if (s)he desire.

Starting Date : Beginning of September of 2021 (Negotiable)

Eligibility : Candidates must hold a **PhD degree in Physics** with previous experience in soft matter systems. Experience in Magnetic manipulation will be valuable, but it is not compulsory.

Duration : minimum 1, extendible up to 3 years.

Salary : The net salary will depend on the expertise, and be in line with those paid by Catalan Universities. Funding will be available to cover participation to conferences/workshops.

How to apply: the candidate will send via e-mail his/her Curriculum Vitae with a list of Publications, and a minimum of two letters of recommendations to: ptierno@ub.edu

Send your application before July 2021