



INFORMATION ON THE COMPETITION

Krakow, 12th March, 2019

**DEAN
OF THE FACULTY OF PHYSICS, ASTRONOMY
AND APPLIED COMPUTER SCIENCE**

Address: 11, Łojasiewicza street
30-348 Kraków, Poland
Phone no./fax: (+48) 12 664 4890

**RECTOR
of the Jagiellonian University
announces competition for the post of
ADJUNCT RESEARCH PROFESSOR**

in the Institute of Physics
at the Faculty of Physics, Astronomy
and Applied Computer Science

**within the scope of Polish National Agency for Academic Exchange (NAWA) Polish Returns
no. PPN/PPO/2018/1/00011/U/00001, *Principles of information decoding in developmental systems.***

For the post of adjunct professor may apply persons who fulfil requirements stated in Article 113, 116 (2) (3) of the Act of 20th July 2018 Law on higher education and science.

Development of multicellular organisms is a remarkably reproducible process. During development cells are exposed to chemical cues that determine cell fate with positional precision of a few cell diameters. How this reproducibility is achieved is a fundamental question in biology that is still poorly understood. The proposed project addresses this question by applying methods of theoretical physics to model specific biological systems. As a result, factors affecting information decoding in developmental systems will be identified. Identification of principles of information decoding in developmental systems, can have substantial impact in studies in a broad range of tissues and stem cell systems.

Requirements:

- 1) PhD in physics, mathematics, computer science or similar.
- 2) Excellent academic track record.
- 3) Interest in the interdisciplinary aspect of the project.
- 4) Experience with numerical solvers (C++, Python, or Mathematica).
- 5) Proficiency in written and spoken English.
- 6) Experience in complex systems or biological networks will be an asset.

Research tasks:

- Proposing and analyzing models of developing tissue in the framework of theoretical physics.
- Making model predictions that can be verified experimentally in selected biological systems.
- Participation in overall scientific activity of the research group.

Terms of employment: Full time employment for initial 24 months with possible extension

Starting date: Summer 2019

Salary: 10 000 PLN before-tax per month

Applications (scientific CV, list of publications, two recommendation letters) should be submitted to Dr Marcin Zagórski via e-mail: marcin.zagorski@uj.edu.pl with annotation "postdoc" by **17th May 2019**.

Competition starting date: 15th April 2019
Submission deadline: 17th May 2019
Competition results will be announced by: 1st June 2019

Jagiellonian University does not provide housing.

Statement forms can be downloaded on the website:

<http://www.dso.uj.edu.pl/druki-do-pobrania/dokumenty-dla-kandydatow-pracownikow>

On the basis of authorization
of the Rector of Jagiellonian University
Dean of the Faculty of Physics, Astronomy
And Applied Computer Science