



**GREEK REPUBLIC  
UNIVERSITY OF IOANNINA  
SCHOOL OF SCIENCES  
PHYSICS DEPARTMENT**

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**CALL FOR PROPOSALS**  
**FOR EIGHT (8) PhD POSITIONS**

The Department of Physics of the School of Sciences of the University of Ioannina accepts applications for doctoral dissertation (PhD) in the following indicative research fields:

|          | <b>Dissertation subject area</b>   | <b>Contact Person</b>                         | <b>tel./ e-mail</b>  |
|----------|--|---|--|
| <b>1</b> | Flame Spray Pyrolysis Engineering of Catalytic Nano Suboxides  | Professor Yiannis Deligiannakis               | 2651008662<br><a href="mailto:ideligia@uoi.g">ideligia@uoi.g</a>             |
| <b>2</b> | Engineering of Hybrid Plasmonic Nanomaterials by Flame Spray Pyrolysis   | Professor Yiannis Deligiannakis               | 2651008662<br><a href="mailto:ideligia@uoi.g">ideligia@uoi.g</a>             |
| <b>3</b> | Study of the partonic origin of hadronic jets at the CMS experiment of LHC   | Assistant Professor John Strologas            | 2651008513<br><a href="mailto:strolog@uoi.gr">strolog@uoi.gr</a>             |
| <b>4</b> | Development of a remote sensing system for precipitation using microwave links   | Assistant Professor Vasilios Christofilakis   | 2651008542<br><a href="mailto:vachrist@uoi.gr">vachrist@uoi.gr</a>           |
| <b>5</b> | Study of the $^{243}\text{Am}(n,f)$ reactions at the n_TOF at CERN   | Associate Professor Nikolaos Patronis         | 2651008551<br><a href="mailto:npatronis@uoi.gr">npatronis@uoi.gr</a>         |
| <b>6</b> | Measurements of jet production cross sections and studies of Quantum Chromodynamics with the CMS experiment at the LHC   | Professor Panagiotis Kokkas                   | 2651008520<br><a href="mailto:pkokkas@uoi.gr">pkokkas@uoi.gr</a>             |
| <b>7</b> | Detailed estimation of the Earth's global dimming and brightening phenomenon under clear and all-sky conditions using state-of-the-art tools and long-term climatic data | Associate Professor Nikolaos Hatzianastassiou | 2651008539<br><a href="mailto:nhatzian@uoi.gr">nhatzian@uoi.gr</a>           |
| <b>8</b> | Development of trigger systems for the CMS detector at the HL-LHC and CERN and studies of signatures from theories beyond the Standard Model                             | Professor Constantinos Foudas                 | 2651008750<br><a href="mailto:costas.foudas@uoi.gr">costas.foudas@uoi.gr</a> |

Eligible to apply are holders of a Master's Diploma (MSc) in physics or physics-related subjects by national or foreign recognized as equivalent, institutions ( $\Delta.O.A.TA.II.$  (in accordance with law 3328/2005 (A' 80)). In

special cases, eligible to apply are PhD candidates who do not hold a Master's degree. These cases only concern postgraduate students who are enrolled in one of the Postgraduate Studies Programs, have successfully completed the courses within the foreseen time and their performance is excellent. Their application form is submitted within the same time period specified in the current Call for Proposals and does not count towards the total number of vacancies.

Interested parties are invited to submit the following documents by **30-9-2020** to the Secretariat of the Department of Physics:

1. Application Form
2. Detailed Curriculum Vitae.
3. Certificate of adequate knowledge of at least one official language of the European Union, preferably English.
4. An outline of the proposed doctoral dissertation.
5. Copy of a Masters diploma in science (MSc).
6. Transcript of records of undergraduate and graduate grades.
7. Certificate (Δ.O.A.T.A.Π.) (if required)
8. At least two recommendation letters.
9. Statement from the candidate about the research field in which he or she wishes to conduct his or her doctoral dissertation. This option may be one of the research fields outlined in the call proposal. If the selected option is not included in the call proposal, the candidates are required to submit a detailed description of the research subject (at least 500 words).
10. Photocopy of Police ID.

The languages of submission of the proposed title and of the outline of the dissertation may be Greek and / or English.

Candidates are selected on the basis of their performance in undergraduate and postgraduate studies, the interview (which may also be done by video-conference), the recommendation letters they submit as well as the scientific papers or other research work they have conducted.

The selection process will be completed by **30-11-2020**.

For more information, please contact the Secretariat of the Department during working days and hours at (0030)-26510-07491.

Ioannina, 22-06-2020

The Chair of the Department

\*

Panagiotis Kokkas

Professor

\*The signature has been placed on the original that is on file in the archives of the Secretariat.