

Call for PostDoctoral position in the field of Experimental Heavy-Ion Physics within the ALICE experiment

Warsaw University of Technology (WUT) is a technical research university with traditions in education dating back to the 19th century, being the oldest of its kind in Poland. It is a forward-thinking institution where high-quality education meets world-class research and innovation. WUT is ranked number one among all technical universities and number three among all universities in the country.

Warsaw University of Technology participates in two LHC experiments: ALICE (physics and computing) and CMS (electronics) as well as several non-LHC experiments (including NA61/SHINE or STAR). The ALICE group at WUT consists of 9 staff members (including 2 full professors) and a number of Ph.D., M.Sc., and B.Sc. students working in the group during realization of their diploma theses. We are active in the physics analysis of ALICE data including femtoscopy and angular correlations. The group also closely cooperates in this field with the STAR group at WUT. Other activities include responsibility for running and maintaining the event display software in ALICE as well as active involvement in machine learning tools and methods to be used in various aspects of the experiment.

Job Description

The successful candidate is expected to play a significant role in the correlation analysis of pp and Pb-Pb collisions registered by ALICE. He/she will be investigating correlations involving baryons (including strange baryons) and light nuclei such as proton-deuteron, proton-triton, proton-Xi, proton-Omega, etc. In particular, he/she will aim to estimate the parameters of the strong interaction for those pairs using such correlations. Close collaboration with the STAR group and possibility to perform comparative studies to similar STAR results may also be considered.

The successful candidate will be employed as a Research Assistant Professor (Polish: *adiunkt naukowy*) at the Faculty of Physics, WUT, within the project *Probing baryon and antibaryon interactions in relativistic ion collisions in STAR at RHIC and ALICE at LHC* (research grant from Polish National Science Center) for a minimum period of 12 months, which may be extended up to 30 months, provided the satisfactory outcome of the evaluation after the first 12 months.



Requirements

- Ph.D. in experimental particle physics or nuclear physics
- Strong programming skills in C/C++ and/or ROOT and experience in analysis of large volume datasets
- Expertise in developing physics analysis code
- Good understanding of computing aspects of large particle physics experiments
- Experience in particle correlation analysis will be of advantage
- Of additional advantage will also be possessing some knowledge of CUDA and/or machine learning methods

Employment status

Full time, position starts: **January 01, 2019**

The position is 100% research, without any teaching obligations. However, the selected candidate will have the opportunity to supervise B.Sc. and M.Sc. students and/or teach selected classes.

Salary

From 8,000 to 10,000 PLN per month (before taxes).

Subject to qualifications of the selected candidate.

How to apply

Interested applicants should provide:

- CV
- List of publications (indicating the % of their contribution to the most relevant ones)
- A short letter of motivation
- At least two letters of recommendation

The documents should be sent

before August 15, 2018

via e-mail to: alice-wut-jobs@cern.ch

or by regular post to:

Prof. Adam Kisiel
Warsaw University of Technology – Faculty of Physics
ul. Koszykowa 75
00-662 Warszawa
POLAND

For more information regarding the position please send an e-mail to:

alice-wut-jobs@cern.ch

