Experimental/Data science
postdoctoral positions in High Energy Physics

Tuesday, 17 May 2022

The Experimental HEP group at the Weizmann Institute of Science (WIS) is looking for a postdoctoral research fellow in the field of Experimental High Energy Physics for exciting new research focusing on applications and development of advanced machine learning techniques for event reconstruction and data analysis at the LHC.

Jobs description

Our group focuses on:

- using graph neural networks for reconstruction tasks such as particle flow and vertex reconstruction
- super-resolution of calorimeter energy measurements
- improving heavy flavor tagging with graph neural networks
- anomaly detection with autoencoders
- density estimation with graph networks

This job is also suitable for scientists who wish to be involved at the LHC and have not done it so far. It is possible to include qualification work at ATLAS as part of the PostDoc research. Some more details about our group activity can be found here: http://www.weizmann.ac.il/particle/Gross/ .

The post is to be based in WIS with trips to CERN and MBZUAI, Abu Dhabi when necessary.

Part of the job is under the framework of the MBZUAI-WIS Joint Program for AI Research. We also work in close collaboration with the Roma-Sapienza group of Prof Marumi Kado.

Requirements

The applicant should have a Ph.D. degree in physics and/or computer science, with excellent programming skills. Experience in machine-learning techniques is an advantage. Leadership skills are a benefit since the job involves also supervising students and possible teaching.

Salary and benefits

Following the University regulations: The positions are initially for two years, and can be extended. For details see https://www.weizmann.ac.il/feinberg/fellowship-aid/postdoctoral-fellows

Application

The application should include a CV and a list of publications.

Applicants should arrange to have three letters of reference.

Applications and recommendation letters should be sent by email to eilam.gross@weizmann.ac.il with a subject title ***HEP/ML Postdoc Search***.

The review of the applications will begin immediately and will continue until the positions are filled.

For further information please contact eilam gross