

The Department of Particle Physics (DPNC) at the University of Geneva invites applications for a pair of

Postdoctoral Research Associates

to conduct research within the ATLAS Experiment at the CERN Large Hadron Collider.

The DPNC has made significant contributions across a wide range of ATLAS activities, including detector construction and operation, triggering, software, reconstruction, and data analysis. Details of the current department activities and interests can be found on the DPNC website (https://www.unige.ch/dpnc/en/).

The selected candidates will join a new innovative ERC-funded project oriented around searches for new hadronic physics with the ATLAS Detector, and will be expected to participate in activities primarily related to hadronic physics reconstruction and data analysis techniques, as aligned with the project funding. The two positions are briefly detailed below:

1. The first position will focus primarily on hadronic physics reconstruction and tagging techniques as applied to searches for new physics resonances. Previous experience in hadronic physics reconstruction and/or tagging activities, or other object-reconstruction activities, is very welcome but not required.

2. The second position is based around anomaly and outlier-detection techniques, and is aimed at searches for new hadronic physics. Previous experience in hadronic physics reconstruction techniques would be beneficial, but is not required. In contrast, past experience in the use of machine learning is a pre-requisite for this position.

Both of the positions are limited to three years, with the possibility for a one-year extension. Preference will be given to candidates with less than three years of postdoctoral experience.

To apply, please send a CV, publication list, and a short statement on personal motivation and research interests to <u>steven.schramm@unige.ch</u>. You should also arrange for three reference letters to be sent directly to the same email address.

Applications will be reviewed as they arrive until exceptional candidates are identified; for full consideration, please make sure that all of your materials are **submitted by September 12, 2021**. The position is expected to start in Winter or Spring 2022.

Any inquiries related to these positions should be sent to <u>steven.schramm@unige.ch</u>.