

JEFFERSON LAB Theory Center Postdoctoral Positions 2016

The Jefferson Lab Theory Center expects to have up to four postdoctoral positions from September 2016 to join a program of research in theoretical hadronic and nuclear physics that motivates and supports JLab experiments at 12 GeV and beyond.

This includes:

- Calculation of the properties of light nuclei and their electroweak interactions using Quantum Monte Carlo methods;
- Studies of strong coupling QCD on the lattice and in the continuum to compute the spectrum, decays, transition form factors and multidimensional structure of hadrons;
- The application of Effective Field Theories to nuclear and hadronic properties;
- The application of perturbative QCD to single and multi-dimensional hadron distributions (both TMDs and GPDs), and their extraction from data applying QCD factorization theorems;
- The application of scattering theory methods to the phenomenology of multi-hadron final states relevant for the spectroscopy program at JLab and elsewhere;
- and the implication of all such studies for a future electron-ion collider.

These positions are normally for two years, but outstanding performance may allow an extension to a third year. There are established networking opportunities to interact and collaborate with researchers worldwide to bring global experience and expertise to bear on extracting definitive physics results from the JLab 12 GeV experimental program. You can find more about the Theory Center by clicking on:

https://www.jlab.org/theory-center

A strong publication record in any of the areas of interest is essential, together with a PhD in hadron or nuclear physics.

Your application can be made by uploading (1) your cv, (2) research interest and (3) publication list to the web site: <u>https://careers.peopleclick.com/careerscp/client_jeffersonlab/external/search.do</u> for any of Position Nos. 11714, 11715, 11716, 11718 or by sending these documents electronically to the Theory Center Director, Dr. Michael R Pennington (michaelp@jlab.org). Three letters of recommendation should be sent on your behalf to the same email address. Full consideration will be given to applications received by December 5, 2015.

For more Information: <u>https://www.jlab.org/job-openings</u>