



The Nikhef Theory group has two openings for

### **Postdoctoral researcher in theoretical particle physics**

Nikhef (<https://www.nikhef.nl/>) is the national institute for subatomic physics in The Netherlands. At Nikhef, approximately 175 physicists and 75 technical staff members work together in an open and international scientific environment. Together, they perform theoretical and experimental research in the fields of particle- and astroparticle physics. Among the research collaborations Nikhef participates in are the ATLAS, LHCb and ALICE experiments at CERN, the KM3NeT neutrino telescope in the Mediterranean, the VIRGO interferometer in Pisa, the Xenon1T dark matter experiment in Gran Sasso and the Pierre Auger cosmic rays observatory in Argentina. Nikhef also hosts well staffed theoretical physics and detector R&D groups.

The activities of the Theory group of Nikhef include higher order calculations and jet physics in perturbative Quantum Chromodynamics, parton distribution functions, 3D imaging of the proton, flavour physics, gravity, and cosmology, among others. The Nikhef theory group and Nikhef as a laboratory provide a stimulating environment with many seminars, colloquia, and journal clubs meetings. More information about Nikhef's theory group can be found in:

<https://www.nikhef.nl/pub/theory/general.html>

**Job description** One of these two positions is funded through the NWO-Vidi project "*Decoding singularities of Feynman graphs*", with Dr. Franz Herzog as Principal Investigator. Potential candidates should have an interest in higher order amplitude calculations relevant to collider physics. For further information and informal inquiries please contact [ferzog@nikhef.nl](mailto:ferzog@nikhef.nl).

The second position is funded by the NWO-Projectruimte project "*Nuclear parton distributions with LHC data*", with Dr. Juan Rojo as Principal Investigator. Potential candidates should have interest in collider phenomenology, in particular Quantum Chromodynamics, and applicants with excellent software and programming skills, in particular in C++ and Python, are specially encouraged. For further information and informal inquiries please contact [j.rojo@vu.nl](mailto:j.rojo@vu.nl), and general information about the group can be found in [www.juanrojo.com](http://www.juanrojo.com).

Applicants should have a Ph. D degree in theoretical physics (or a closely related topic) by the time they start their appointment at Nikhef.

**Offer details** These initial duration of these positions is of two years, with the possibility of an extension to a third year subject to satisfactory performance of the candidate. The conditions of employment are excellent, and include a competitive salary, extra months' salary payment in May and December, as well as an adequate allowance for travel and consumables. The starting date of the position is expected to be on the **1st of September 2018** or as soon as possible thereafter.

**Application submission** Please send all your application materials using the link that can be found in:

<https://www.nikhef.nl/jobs/vacatures/>

which should include a cover letter, an updated curriculum vitae, and a brief motivational statement of your research interests and of the reasons of why you are applying for these positions. Only applications received **before the 1st of December 2017** will receive full consideration. Moreover, the applicants should arrange for **three** letters of recommendation to be submitted on her/his behalf.