

## **Foundation for Fundamental Research on Matter**

*The Foundation for Fundamental Research on Matter (FOM) promotes, co-ordinates and finances fundamental and applied physics research of international standard/calibre in The Netherlands. It is an autonomous foundation responsible to the physics division of the national research council NWO. FOM employs about 1100 people, primarily scientists (including PhD students) and technicians, who work at FOM research institutes and research groups at universities. FOM is chiefly financed by the NWO (Netherlands Organisation for Scientific Research) Governing Board and NWO Physics and can be considered as the Physics Division of NWO. In addition to the government funds of NWO, FOM acquires financial means from the European Union and through collaboration with the industry and universities. For additional information see <http://www.fom.nl>*

FOM has recently approved a new research programme on astroparticle physics, which represents a collaborative effort between research groups at the FOM institute for subatomic physics NIKHEF in Amsterdam, the nuclear physics institute KVI at the University of Groningen and the Institute for Mathematics Astrophysics and Particle Physics (IMAPP) at the Radboud University in Nijmegen.

Astroparticle physics represents a new field of research at the interface of astronomy, physics and cosmology. In this interdisciplinary research domain a range of frontier questions in science are addressed, ranging from the origin of high-energy cosmic rays, the nature of dark matter to the observation of gravitational waves. More information on astroparticle physics research in the Netherlands can be found at [www.astroparticlephysics.nl](http://www.astroparticlephysics.nl).

In the framework of the new FOM research programme measurements will be performed at two recently completed observatories: the deep sea neutrino telescope Antares and the Pierre Auger cosmic ray Observatory in Argentina.

The measurements are aimed at discovering the origin of very high energy cosmic rays. To carry out such measurements FOM is searching for

## **PhD students in astroparticle physics**

The successful candidates will contribute to the development of both observatories, the analysis of the data collected by these observatories and their interpretation.

The work will be based in either one of the participating institutes in Amsterdam, Groningen or Nijmegen and includes frequent visits to the observatories in France or Argentina.

FOM offers young researchers outstanding opportunities in the field of scientific research, in which international co-operation and quality are keywords. If you have a Master degree in a relevant field such as (technical) physics or astronomy, enjoy working in a team, and have the perseverance to complete a PhD thesis within four years, you are the candidate for experimental PhD research in astroparticle physics.

### **Training**

You will receive a thorough training within the national research school Subatomic Physics. You will profit from the structured and multidisciplinary training and research programme and have the opportunity to experience working in an international collaboration. Information about the scientific and educational activities at Nikhef ([www.nikhef.nl](http://www.nikhef.nl)), KVI ([www.kvi.nl](http://www.kvi.nl)) and

IMAPP ([www.ru.nl/imapp](http://www.ru.nl/imapp)) can be found at the corresponding websites.

### **Conditions of employment**

You will be employed by the FOM-foundation and will obtain the status of junior scientist. You will receive a 4-year contract. Your gross monthly salary will be up to a maximum of € 2.457,-.

The conditions of employment of the FOM-foundation are laid down in the Collective Labour Agreement for Research Centers (CAO Onderzoek-instellingen), more information is available at the website [www.fom.nl](http://www.fom.nl).

### **Information**

For further information please contact Prof. Dr. Gerard van der Steenhoven, the leader of the FOM programme (phone: 020-5922145, email: [gerard@nikhef.nl](mailto:gerard@nikhef.nl)). Website: [www.cosmicrays.nl](http://www.cosmicrays.nl).

### **Application**

Send your application, accompanied by a curriculum vitae and a short motivation describing your interest in Astroparticle Physics, before April 1st, 2007, to the attention of Mr. T. van Egdom, P.O. Box 41882, 1009 DB Amsterdam or by email: [pz@nikhef.nl](mailto:pz@nikhef.nl). Please quote: vacancy number 08.0063. All qualified individuals are encouraged to apply.

