

# HELMHOLTZ YOUNG INVESTIGATOR GROUPS

## WANT TO RUN YOUR OWN RESEARCH GROUP AND DEVELOP YOUR CAREER?

If so, you should consider becoming a Helmholtz Young Investigator Group (YIG) leader. On top of the regular opportunities to become a junior research group leader at the Helmholtz Association's 18 research centres the *President's Strategic Fund* creates 20 new YIGs based on the strength of the research proposals put forward by early career post-doctoral scientists.



Image: David Ausserhofer / IPP Greifswald

### ELIGIBILITY

The Helmholtz Association has an annual open international call for applications to become a YIG leader. You will be eligible if you have between two and six years' postdoctoral experience, research experience abroad and, of course, an exceptional research proposal consistent with the Helmholtz Association's six fields of research (see table below). International experience can include a continuous stay abroad of at least six months, the coordination of a major international research project or significant involvement in a major international research cooperation. Exceptions to eligibility can be granted on family grounds.

### THE PRESIDENT'S STRATEGIC FUND

One of the goals of the *President's Strategic Fund* is to attract the most talented early career researchers from around the world and support them to flourish within the Association and its wider international networks. To date, the YIGs have been highly successful in achieving this.

### HELMHOLTZ YOUNG INVESTIGATOR GROUPS (YIGS)

The Helmholtz YIGs foster early academic independence and offer a secure career. YIGs provide outstandingly talented early career researchers with independence and high-quality training at the Helmholtz Management Academy. YIG leaders are expected to build and maintain close contacts at partner universities and undertake teaching and PhD supervision. YIGs receive a minimum of €300,000 a year to cover the

employment of the group leader (c.€63,000 a year), scientific and technical staff (three or four on average) and expenses for materials, supplies and investment. The whole range of the Helmholtz Association's infrastructure is also accessible for the use of the YIG.

YIGs can be based at a Helmholtz research centre or jointly at a research centre and an university and they must perform specific scientific work for both partner institutions. Where possible, leaders of the Helmholtz-university YIGs are given joint positions as professors. A tenure track to professorship is also an option for YIG leaders. International partnerships are welcomed but YIGs cannot be established outside of Germany.

To date (2016) nearly 200 Helmholtz YIGs have been created.

### SELECTION PROCESS

There are up to 20 new Helmholtz Young Investigator Groups created each Spring following an open call. There are three stages to the application but perhaps the most important stage is to explore ideas with potential research partners at the Helmholtz research centre into which the group would be integrated.

#### The formal stages are:

1. apply with the research proposal to the central administration of the Helmholtz research centre likely to host the group.
2. Helmholtz research centres select the best proposals that they have received and/or developed and forward them to the Helmholtz Head Office in Berlin. A panel of international experts assess the proposals and select 30 to go through to a final selection panel.
3. the proposals are presented by the applicant to an interdisciplinary panel of eminent scientists at the Helmholtz Central Office and 20 individuals are normally awarded funding.

If you have an excellent research question and would like to lead a group seeking to answer it explore how you fit into the Helmholtz portfolio now.



Image: Yvonne Peters

### *Dr Yvonne Peters: Top Quark Young Investigator Group at Atlas*

During my study at the University of Wuppertal and as postdoctoral fellow at the University of Manchester, I worked in an international collaboration at Fermilab in Chicago and developed contacts within the ATLAS

group at the Deutsches Elektronen-Synchrotron (DESY) Helmholtz research centre in Hamburg and the University of Göttingen. Together, we built a proposal to explore fundamental questions of physics by analysing the heaviest known elementary particle in ATLAS data from the Large Hadron Collider at CERN.

It was awesome to get funding to create a research group integrated into ATLAS to pursue my own ideas.

I have learned a lot about setting up and managing a team of researchers, currently consisting of five PhD students and three postdocs. The Young Investigator Group helped me to increase my international profile and future prospects whilst pursuing a fascinating research question.

I advise anyone interested in leading a Young Investigator Group, whether already in Germany or abroad, to contact the research institute within the appropriate Helmholtz research centre as soon as practicable. If you have a good research proposal you will get a lot of support to make it a reality. You definitely won't regret it!

## A SELECTION OF HELMHOLTZ YOUNG INVESTIGATOR GROUPS

Of the nearly 200 YIGs created to date, 50 are still within their funding period. Examples include:

GROUP TITLE	RESEARCH FIELD	PARTNER UNIVERSITY	HELMHOLTZ RESEARCH CENTRE
Regenerative medicine for metabolic diseases	Health	Berlin Charité	Max Delbrück Center (MDC)
VIP-QM: exploring quark matter with virtual photons	Matter	Darmstadt Technical University	Helmholtz Centre for Heavy Ion Research (GSI)
Development of the microbial electro-catalysis for chemical synthesis	Earth and Environment	Leipzig University	Helmholtz Centre for Environmental Research (UFZ)
Oxide Spintronic Laboratory	Key Technologies	Duisberg-Essen University	Forschungszentrum Jülich (FZJ)
Nano-optical concepts for Chalcopyrite solar cells - Nanooptix	Energy	Free University, Berlin	Helmholtz Centre for Materials and Energy (HZB)
AerCare – Impacts of aerosol layers on atmosphere and climate	Aeronautics, Space and Transport	Ludwig-Maximilians University, Munich	German Aerospace Center (DLR)