

## **Postdoc position: Advanced Active Antiferromagnetism – a new route for nanoelectronics**

### **Job Description**

We offer a 2 year Postdoc position, embedded in the Research Group Physics of nanostructures at the Department of Applied Physics. The experimental research involves fabrication of relevant device structures, magnetic and structural characterization, and in particular spin transport studies.

### **Research**

In the field of antiferromagnetic Spintronics, there is a job opening for a fulltime postdoctoral (PD) researcher for a period of two years. Antiferromagnets are characterized by the absence of macroscopic magnetism due to an internal spin texture of antiparallel moments, which is an extremely favorable feature for robust data storage. The proposed experiments are concentrating on the active use of ultrathin antiferromagnets for reading and writing information, and will give new fundamental insights regarding the complex interaction between spin currents and nanomagnetic textures. The PD will work closely together with a PhD-student already working in this field, currently exploring several materials and structures for the realization of these novel data storage possibilities.

### **Job requirements**

We seek excellent candidates who completed their PhD in physics recently, are about to finish soon, or have a few years of postdoctoral experience. We expect the PD to have extended experience in the field of spintronics, with an emphasis on the technology and physics of spin structures and thin-film devices. A curiosity driven and creative research attitude, a drive to shape your own project and good collaborative skills will be expected. Full professional fluency in English is required.

### **Conditions of employment**

The PD will be employed by TU/e on a project that receives funding from NWO by a NWO Natuurkunde 'projectruimte' grant.

We offer a challenging job in a dynamic and ambitious university through a fixed-term appointment for a period of two years. As an employee of the university you will receive a competitive salary as well as excellent employment conditions.

The salary may vary between € 3.255 and € 4.274 per month (gross), depending on your experience. Moreover, an 8 percent holiday allowance and 8.3 percent end-of-year allowance is provided annually. Assistance for finding accommodation can be given.

The university offers an attractive package of fringe benefits such as excellent technical infrastructure, child care, savings schemes, and excellent sports facilities.

## **Information and application**

Information on employment conditions can be found at [www.tue.nl/](http://www.tue.nl/)

For more specific information about this position please contact [Prof.dr.ir. Henk Swagten](mailto:h.j.m.swagten@tue.nl), +31 40 247 57 78, [h.j.m.swagten@tue.nl](mailto:h.j.m.swagten@tue.nl)

Application: <https://jobs.tue.nl/en/vacancy/postdoc-position-advanced-active-antiferromagnetism-471136.html>