

Laboratory of Crystallography

University of Bayreuth, 95440 Bayreuth, Germany

## **PhD-student position**

Bayreuth, 23 March 2019

The Laboratory of Crystallography at the University of Bayreuth, Germany, is searching for a PhDstudent on the topic

## Structure, dynamics and electronic properties of aperiodic crystals

Aperiodic crystals are fascinating materials that possess long-range order but lack lattice periodicity. They are found in a variety of systems, including intermetallics, oxides, high-Tc superconductors, minerals and proteins. The PhD thesis is part of a French-German collaborative consortium, involving six laboratories studying aperiodic crystals. The focus of the thesis is on the interrelation between structure, dynamics and electronic properties of selected modulated and composite aperiodic crystals. The PhD student will be based in Bayreuth. He or she will be involved in elastic and inelastic scattering studies with X-rays and neutrons at large-scale facilities in Europe, mainly in Hamburg, Munich and Grenoble. The PhD student will benefit from the broad expertise within the consortium and also from interactions with the other PhD students in Grenoble and Caen (France) and Erlangen and Halle (Germany).

The successful candidate has a Master degree in Physics, Chemistry, Crystallography or a related field. The project is funded by the German Science Foundation (DFG); payment is according to TV-L E13/half.

Applications should be sent by E-mail to Prof. Sander van Smaalen, Laboratory of Crystallography, University of Bayreuth, 95440 Bayreuth, Germany. E-mail: smash@uni-bayreuth.de. Please include scanned copies of relevant documents. Applications will be considered until the position is filled.

Sander van Smaalen