

In the Quantum Logic Spectroscopy Group of the QUEST Institute we are looking for a scientist (PostDoc) in the field of optical clocks

to join us as soon as possible. The post is initially limited to 2 years, an extension of the contract up to 6 years is possible. You will be given the opportunity to develop your own research profile and to obtain your habilitation at Leibniz Universität Hannover. The salary will be paid in accordance with remuneration group 13 TVöD Bund. You will be employed at our Braunschweig site.

The research within the Quantum Logic Spectroscopy Group revolves around precision spectroscopy of trapped and laser-cooled atomic and molecular ions. For this purpose, we develop novel technologies for the coherent manipulation of single ions and their spectroscopy.

#### Area of activity

We develop optical clocks based on singly-charged aluminium and calcium atoms. Through the development of special cooling techniques and by employing correlations between several ions within the scope of SFB 1227 (DQ-mat) we aim for a relative uncertainty of 10<sup>-18</sup> and below. These high-precision clocks will be used for tests in fundamental physics, such as a possible variation of fundamental constants, and for relativistic geodesy. The aim is to exploit frequency differences between distant clocks due to relativistic effects for the measurement of height differences. For this purpose, a transportable clock will be developed within the scope of SFB 1128 (geo-Q).

We are part of an excellent research environment and have access to PTB's unique infrastructure. The group has excellent connections to other groups at a national and international level and is involved in several coordinated research projects.

Please apply through our online submission system by April 13, 2017:

[https://www.ptb.de/cms/en/about-us-careers/careers/bms-stellen/bms-stelle.html?tx\\_jobmodul\\_pi1%5Bjob%5D=1807&tx\\_jobmodul\\_pi1%5BlistBackPid%5D=11489&cHash=4dfbb65a7e82e388f2c386114fa3c702](https://www.ptb.de/cms/en/about-us-careers/careers/bms-stellen/bms-stelle.html?tx_jobmodul_pi1%5Bjob%5D=1807&tx_jobmodul_pi1%5BlistBackPid%5D=11489&cHash=4dfbb65a7e82e388f2c386114fa3c702)

The deadline will be extended until a suitable candidate has been found.

For further inquiries, please contact:

Prof. Dr. P. Schmidt, phone: +49 (0)531 592-4700,

E-mail: [Piet.Schmidt@quantummetrology.de](mailto:Piet.Schmidt@quantummetrology.de)