



## Group Leader (m/f) Total Resilience

Job-ID: 4021/18 | Dept.: System Design | Salary: according TV-L scale | Limitation: 3 years with option of extension |  
Entry Date: asap

IHP is an institute of the Leibniz Association and conducts research and development of silicon-based systems and ultra-high-frequency circuits and technologies including new materials. It develops innovative solutions for application areas such as wireless and broadband communication, security, medical technology, industry 4.0, automotive industry, and aerospace. IHP employs approximately 330 people. It operates a pilot line for technological developments and the fabrication of high-speed circuits with 0.13/0.25  $\mu\text{m}$  BiCMOS technologies, located in a 1000 m<sup>2</sup> class 1 cleanroom.

### The Research/Position:

- Investigation of new methods for specification and design of resilient systems
- Exploration of new models, algorithms and behavior definition of system's self-awareness and cognitive acting
- Primary responsibility for establishing a research group from scratch
- Leading a group of prospectively 20 people (scientists and PhD students)
- Interdisciplinary collaboration along IHP's vertical architecture from systems down to material research
- Responsibility for acquiring additional funding within third party projects
- Option to obtain a joint professorship with a university

### Your Qualifications:

- Postdoctoral experience in the field of computer science, electrical engineering, physics or similar
- Strong background in at least two of the following fields:
  - Fault tolerance (design and test, error detection and handling etc.)
  - Security (intrusion detection, malware detection, design of secure operating systems etc.)
  - Communication systems (Networking protocols, error correction, self-healing etc.)
  - Decision support systems (neural network, Bayesian networks, fuzzy controllers etc.)
  - Cognitive system/AI/machine learning
- Good understanding of electrical engineering/semiconductor physics
- Very good oral/written skills in English
- Basic skills of German language
- Strong record concerning third party funding

### Our Offer:

Do research in a challenging, multinational environment, with excellent career prospects. You will have the opportunity to establish an international reputation at the forefront of high tech. It is important to us to support the individual career developments of our employees (e.g. conferences, advanced trainings). More information about our scientific excellence, employment and life at IHP can be found on our website.

IHP seeks to incorporate more women into leadership positions in the science field. Therefore, women are strongly encouraged to apply. Disabled applicants, qualified according to the above criteria, will be given preference over other candidates with equivalent relevant qualifications.

### Your Application:

Have we sparked your interest? Then we look forward to receiving your application via our [online application form](#).

For further information regarding the position please contact Prof. Dr. Rolf Kraemer (Dept. Head System Design): [kraemer@ihp-microelectronics.com](mailto:kraemer@ihp-microelectronics.com).

