

// We are seeking a leading international scientist (m/f/d) with a compelling vision to establish and lead a new research institute and a newly established chair in computational systems science to serve as the

FOUNDING DIRECTOR (M/F/D)

of the Center for Advanced Systems Understanding (CASUS) in combination with being

FULL PROFESSOR (W3) (M/F/D)

of Computational Systems Science at the Technische Universität Dresden in joint appointment with the Helmholtz-Centre Dresden-Rossendorf e.V. (HZDR) according to the Jülicher Modell at the earliest possible date

// The vision for the institute CASUS is to understand complex systems in earth and natural sciences, biomedical science, engineering, and social sciences by the development of data science methods for complex systems analysis and help to master the challenges in these systems. Future research is interdisciplinary and data-driven. We strongly advocate Open and F.A.I.R. Data.

The institute was founded in 2019 and is based in Görlitz near Dresden. The scientific framework of CASUS is provided by the cooperation of the Helmholtz-Centre Dresden-Rossendorf (HZDR), the Helmholtz Centre for Environmental Research Leipzig (UFZ), the Technische Universität Dresden (TU Dresden), the University of Wrocław (UWr), and the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG). It is expected to further develop vibrant collaborations between these partners and to shape CASUS scientifically and strategically. CASUS shall become a widely seen Excellence Center with about 100 employees and internationally recruited, renowned and high potential scientists in a structure of integrated research groups (<https://www.casus.science>).

// The Director's research should have received international recognition within any of the following areas (not a restrictive list):

- Data science and machine learning for complex systems;
- Development and application of methods of artificial intelligence;
- Learning and identification of models from observations or measurement data;
- Data visualization and visual analytics for understanding complex systems;
- High-performance computing for simulating complex systems;
- Numerical simulation methods for complex systems;
- Algorithms for model reduction, uncertainty quantification, and probabilistic prediction.

// As a full professor (W3) of computational systems science, you will also be a full member of the Faculty of Computer Science of TU Dresden, one of the 11 Excellence Universities in Germany. In this role, you are further expected to have excellent teaching capabilities as well as a habilitation or habilitation-equivalent accomplishments.

// As a successful candidate you are an internationally outstanding personality with a university degree in data-intensive science and a proven track record in computational science. We place special emphasis on high impact, peer-reviewed publications, international experience, experience in founding and shaping interdisciplinary and creative research environments. You comprehensively represent the field in research and teaching. You have experience in successfully conducting interdisciplinary research and in inspiring others to achieve scientific excellence and high international impact. You possess several years of research leadership experience. Strategic and conceptual skills to foster the development of the strategic research vision are essential, as are proven leadership skills and a communicative, motivating management style. A strong international scientific network in your research area, as well as strong past performance in the acquisition of independent research funding are required. Applicants must fulfil the employment qualification requirements of § 58 of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG).

// The appointment as Director is for a period of five years. Reappointment is possible. The full professor in computer science at TU Dresden is a tenured professorship. All CASUS partners have set themselves the goal of promoting women in executive positions. Applications from women will therefore be explicitly encouraged. The university and HZDR are certified family-friendly employers and offer dual career services. Applications from candidates with disabilities or those requiring additional support are very welcome.

// For questions regarding the announcement, please contact Professor Dr. Sebastian M. Schmidt, Scientific Director of the HZDR, Tel. **+49 351 260-4800**, email: s.schmidt@hzdr.de.

// Please send your electronic application in English, including a statement of purpose and standard documents (curriculum vitae in tabular form, degree certificates, lists of academic publications, courses taught and evaluations, and research grants acquired), at the latest by 8 October 2021 to:

TU Dresden, Dekan der Fakultät Informatik, Herrn Prof. Dr. Uwe ABmann, Helmholtzstr. 10, 01069 Dresden and in electronic form via the TU Dresden SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single PDF-document to the Dean's dekan.inf@tu-dresden.de

Please note that your application documents will be shared with the members of the search committee and the recruiting agency BELOW TIPPMANN & COMPAGNIE PERSONALBERATUNG GMBH Berlin.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tu-dresden.de/karriere/datenschutzhinweis>.

Further CASUS partners are: