Carl von Ossietzky Universität Oldenburg

ForWind Center for Wind Energy Research Bremen Hannover Oldenburg

The Institute of Physics at the School of Mathematics and Natural Sciences of the Carl von Ossietzky University of Oldenburg, Germany seeks applications for a

W2-Professorship for
Fundamental Aspects of Turbulence and Complex Systems (m/f/x)

commencing as soon as possible.

The professorship will investigate the physical foundations of spatio-temporal turbulence structures and their interaction with dynamic complex systems (e. g. wind energy systems, energy networks with intermittent feed-in). The research topics include turbulence at very large Reynolds numbers and their extreme structures, the relation of meteorological parameters with turbulence structures on different spatio-temporal scales, turbulence-turbulence interaction and the non-linear control of dynamic systems in turbulent environments. These research topics are to be explored by closely combining theoretical, numerical and experimental approaches. In this context, novel methods for designing and operating wind energy systems are to be derived from the basic research-oriented physical investigation of the research topics – using the Research Laboratory for Turbulence and Wind Energy Systems (research building with HPC cluster, wind tunnels, free field measurement equipment).

The sought-after person has distinguished herself/himself through relevant publications. Comprehensive expertise in the field of physical turbulence research in connection with at least two of the following topics must be demonstrated: stochastic processes, dynamic complex systems, interaction in the atmospheric boundary layer, wind energy conversion. Experience in independent project acquisition, proven by successfully acquired competitive third-party funds, is requisite. Active cooperation with the wind physics and other research groups at the institute and the school is expected, as is participation in planned coordinated, interdisciplinary research projects beyond physics – especially within ForWind, the Center for Wind Energy Research of the Universities of Oldenburg, Hannover and Bremen. The successful candidate will further be required to participate in the conception and implementation of new study programmes, in academic self-administration and in teaching undergraduate physics courses. As Oldenburg University and Bremen University are bound by a cooperation agreement, active participation in the cooperation is expected.

Preconditions for employment are specified in § 25 NHG (Higher Education Act of the State of Lower Saxony). Oldenburg University is an equal-opportunities employer and seeks to increase the percentage of women in science. In case of equal qualifications, women will be given preference. Applicants with disabilities will be preferentially considered in case of equal qualifications. The position is suitable for part-time employment.

Applications (including a full curriculum vitae, certificates, list of publications and presentations, five important publications, account of present and previous third-party funded research activities focussing on the last 5 years, documentation of didactic qualifications for higher education, teaching experience and evaluations, research and teaching concept for dealing with the above-mentioned research topics by closely linking theoretical, numerical and experimental methods) must be submitted electronically (one PDF file plus publications) by **31.07.2021** to the Carl von Ossietzky University of Oldenburg, Director of the Institute of Physics, Prof. Dr. Martin Holthaus, email: w2-turbulenz.physik@uni-oldenburg.de.