

Become part of the Cluster of Excellence **ct.qmat** and Research Center SFB 1170 'ToCoTronics'. Established in 2019, the Würzburg-Dresden Cluster **ct.qmat** is a leading international center for research on topological and complex quantum matter. Our aim is to develop a deep understanding of quantum phenomena in general and to identify materials in which those phenomena are observed in the laboratory. **Theoretical Physics IV (Prof. Hankiewicz's group) at Julius-Maximilians-University Würzburg invites applications starting from the next possible date on positions:**

PostDoc/PhD

In the field of „ct.qmat/SFB topic quantum transport in topological materials“.

The research will be focused on modern problems of Theoretical Condensed Matter Physics or at the border between Theoretical Condensed Matter and High Energy Physics including topological states of matter, Weyl semimetals, quantum transport, unconventional superconductivity, electron hydrodynamics, quantum anomalies [1,2,3,4].

The Postdoctoral appointments will be for a period of two years with the possibility of extension to a third year upon positive evaluation. We are searching for highly motivated candidates with a strong background and expertise in theoretical condensed matter physics and/or high energy physics including but not limited to quantum transport in topological materials and electron hydrodynamics. The salary level is determined according to the German public service pay scale TVÖD E13. For Ph.D. students, the average time of employment is 3+1 years, and the salary is half of TVÖD E13. Female candidates are encouraged to apply.

Theoretical Physics IV (Prof. Hankiewicz's group) at Julius-Maximilians-University Würzburg is internationally known for its research in theoretical condensed matter physics including spintronics, quantum magnetism, superconductivity and quantum transport in topological materials., and quantum anomalies. Moreover, it provides a stimulating international research environment with numerous scientific visitors each year, as well as by organizing workshops and conferences in areas relevant to this position.

Questions about this position should be addressed to Prof. Dr. Ewelina Hankiewicz (hankiewicz@physik.uni-wuerzburg.de). Applications are accepted by submitting the application documents (motivation letter, CV, list of publications, a research statement of max. 2 pages length, 2 recommendations) in PDF format to Prof. Dr. Ewelina Hankiewicz (hankiewicz@physik.uni-wuerzburg.de). The deadline for the applications is August 31, 2020. However, the applications will be considered after this deadline until positions are filled.

Scientific Contact: hankiewicz@physik.uni-wuerzburg.de

Cluster Contact: Mail us at jobs.ct.qmat@listserv.dfn.de or visit our homepage www.ctqmat.de

[1] J. Böttcher, C. Tutschku, L. W. Molenkamp, and E. M. Hankiewicz, Phys. Rev. Lett. **123**, 226602 (2019).

[2] H. Ren, F. Pientka, S. Hart, A. Pierce, M. Kosowsky, L. Lunczer, R. Schlereth, B. Scharf, E. M. Hankiewicz, L. W. Molenkamp, B. I. Halperin, A. Yacoby, Nature **569**, 93 (2019).

[3] M. Kharitonov, J.-B. Mayer, and E. M. Hankiewicz Phys. Rev. Lett. **119**, 266402 (2017).

[4] C. Tutschku, J. Böttcher, R. Meyer, E. M. Hankiewicz_arXiv:2003.03146 (2020).