

A new Emmy-Noether research group will start in Fall 2016 at Technical University of Munich. The group will perform interdisciplinary research in condensed matter and ultracold atom physics, mainly concentrated around quantum behavior of low-dimensional fluids. We plan to investigate few- and many-body physics of various two-dimensional quantum systems such as chiral superfluids and superconductors, quantum Hall fluids, rotating Bose-Einstein condensates and quantum Hall ferromagnets.

The research group is led by Sergej Moroz and hosted at TUM by Wilhelm Zwerger. Close collaborations are also envisioned with Michael Knap and the experimental group of Christian Pfleiderer at TUM and also with research groups at Ludwig Maximilian University of Munich and the Max Planck Institute for Quantum Optics.

We have a PhD opening starting in Fall 2016 and invite interested highly motivated students to join us. The proposed PhD topic is the development and application of an effective low-energy theory of two-dimensional quantum fluids listed above with main emphasis on universal aspects related to topology and geometry. Please contact Sergej Moroz (sergej.moroz@colorado.edu) for further inquiries.

About TUM: Technical University is a major research University in Munich. Its Physics Department is based on the Garching campus and is in walking distance from the Max Planck Institute for Quantum Optics.