



We are seeking candidates for a

**PhD position within project A7  
-Theory and simulation of strongly correlated rotating and magnetized plasmas-  
of the Sonderforschungsbereich TR24 (Greifswald-Kiel)**

with a strong interest in theoretical and computational plasma physics. Research areas include the physics of dusty plasmas in confinement potentials, their behavior in a rotating gas environment, and magnetized plasmas.

Our research focuses on the properties of strongly coupled dusty plasmas under the influence of external forces (electric fields, gravity, thermophoretic forces), which lead to an effective confinement of the dust cloud. We use theoretical methods (kinetic and fluid equations, quasi-localized charge approximation) as well as simulation codes (molecular dynamics, Monte Carlo) to determine their collective excitation spectra and transport coefficients. Of particular interest is the influence of strong coupling effects, magnetic fields (equivalent to rotation), and the plasma environment on their properties.

The candidate must hold a Master's degree in physics or have an equivalent qualification. She/he should have a strong background in statistical physics and be familiar with numerical methods. Previous experience with plasma physics is desirable.

The earliest start date of the appointment is January 1, 2014. Women are particularly encouraged to apply. Candidates should submit their application (including a cover letter, CV, list of publications--if any) to

Prof. Dr. Michael Bonitz  
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theo-physik.uni-kiel.de/bonitz

or

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