



College of Liberal Arts and Sciences
Department of Physics

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Two post-doctoral positions are available for work with Sam Trickey and Jim Dufty (Dept. of Physics and Quantum Theory Project) at the Univ. of Florida.

One post is primarily for development, implementation, testing, and first application of finite-temperature density functionals. The other is primarily on simplifying ("de-orbitalizing") higher-rung ground-state exchange-correlation functionals. The areas overlap. Both involve orbital-free density functional theory as well as the conventional Kohn-Sham formulation. See www.qtp.ufl.edu/ofdft for more.

A Ph.D. in physics, materials science, chemistry, or closely related discipline is required. Experience in development of approximate DFT functionals and/or background in free-energy DFT and/or quantum statistical mechanics is highly desirable. Experience in coding new functionals in complex codes (e.g. QuantumEspresso, PROFESS, VASP, WIEN2k) in a LINUX environment is also relevant. Funding is assured for the first year from our DOE and NSF grants, with renewal subject to mutual agreement. Salaries are competitive, commensurate with relevant experience and accomplishments.

Please provide

- [A] a cover letter that addresses clearly but briefly how your experience matches the areas of experience listed above;
- [B] your curriculum vitae (including publication list and your contact information);
- [C] the names and contact information for three references;
- [D] earliest possible start date

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