## Abstract Submitted for the MAR10 Meeting of The American Physical Society

Understanding many-electron fermionic ground states as bosonic excited states BRIAN LANDRY, Harvard University, ADAM WASSERMAN, Purdue University, ERIC HELLER, Harvard University — We consider the novel question of, "Which state in the spectrum of a system of distinguishable particles is the ground state of the same system made up of indistinguishable fermions?" We discuss how this can be approximated for many-electron systems and illustrate its importance in our new semiclassical method correlated Thomas-Fermi (CTF).

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Date submitted: 22 Dec 2009 Electronic form version 1.4