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Finite Temperature Scaling of the Free Energy Density Functional<sup>1</sup> JAMES DUFTY, VALENTINE KARASIEV, SAMUEL TRICKEY, Department of Physics, University of Florida — Recently, we reported exact scaling relations and related bounds and inequalities for the non-interacting ("Kohn-Sham") free-energy density functional [Phys. Rev. B 84, 125118 (2011)]. Here we extend the analysis to obtain similar results for the full,interacting functional. The extension is obtained by dimensionless analysis for the case of v-representable densities. Connection with the corresponding ground-state scaling is made.

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