

Abstract Submitted  
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**Semiclassics in Density Functional Theory**<sup>1</sup> DONGHYUNG LEE,  
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Recently, we published an article [1] about the semiclassical origin of density func-  
tional theory. We showed that the density and the kinetic energy density of one  
dimensional finite systems with hard walls can be expressed in terms of the external  
potential using the semiclassical Green's function method. Here, we show a uni-  
formization scheme for the semiclassical density and the kinetic energy density for  
turning-point problems.

[1] P. Elliott, D. Lee, A. Cangi, and K. Burke, Phys. Rev. Lett. 100, 256406  
(2008).

<sup>1</sup>NSF CHE-0809859

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