

Abstract Submitted  
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**Quasi-free Electron Energy in Near Critical Point He** YEVGENIY LUSHTAK, SAMANTHA DANNENBERG, CHERICE EVANS, Department of Chemistry, Queens College – CUNY, Flushing, NY and Chemistry Department, the Graduate Center – CUNY, Manhattan, NY, GARY FINDLEY, Chemistry Department, University of Louisiana at Monroe, Monroe, LA — We present the quasi-free electron energy  $V_0(\rho)$ , where  $\rho$  is the density, in He from low density to the density of the gas/He-I/He-II triple point, at various noncritical temperatures and on an isotherm near the critical isotherm. These data, which were obtained using field enhanced photoemission, represent the first extended density overview of  $V_0(\rho)$  for He, especially near the critical point. A novel critical point effect is observed and is accurately fitted to the local Wigner-Seitz model, thereby showing that this model, which was developed for attractive systems, can also be applied to repulsive systems.

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