

StudentID: _____

PHYS 451: Quantum Mechanics I – Spring 2017

Quiz #1

The wave the function of a particle is known to be proportional to $x^2 \exp\left(-\frac{|x|}{a} - i\frac{Et}{\hbar}\right)$, where x is its position, t is time, while a and E are real constants. Find the uncertainty in the particle's momentum.