

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Wigner Function for a Quantum Wire with an Impurity YI TANG,
TOMAS MATERDEY, University of Massachusetts Boston — We present the
Wigner function for a Gallium Arsenide (GaAs) quantum wire subjected to a mag-
netic field with an off-center donor impurity. The Wigner function is more sensitive
to detecting changes than the variational wavefunction for smaller scale differences
in a quantum wire with an impurity.

Tomas Materdey
University of Massachusetts Boston

Date submitted: 27 Nov 2007

Electronic form version 1.4