Turkish Journal of Physics

Turkish Journal	Quantization of Reparametrized Systems Using the WKB Method
of	Khaled I. NAWAFLEH, Eqab M. RABEI, Humam B. GHASSIB Department of Physics, Mu'tah University, Al-Karak-JORDAN
Physics	e-mail: knawafleh@mutah.edu.jo Department of Physics, University of Jordan, Amman-JORDAN
Keywords Authors	Abstract: The quantization of reparametrized systems is discussed using the WKB approximation. The Hamilton-Jacobi function, the equations of motion and the wave functionwhich the conditions constrain in the semiclassical limitare determined. The success of this approach is then demonstrated for two applications. The first is an illustrative example of nonrelativistic dynamics. The second is the well-known motion of a relativistic particle in an external electromagnetic field.
6	Key Words: Singular Lagrangian, Parametrized systems, WKB Approximation.
phys@tubitak.gov.tr	Turk. J. Phys., 29 , (2005), 151-162. Full text: <u>pdf</u> Other articles published in the same issue: <u>Turk. J. Phys.,vol.29,iss.3</u> .
Scientific Journals Home Page	