1117-53-345 Jennifer Vaughan* (jennifer.vaughan@mail.utoronto.ca). Dynamical Invariance of a New Metaplectic-c Quantization Condition.

Metaplectic-c quantization was developed by Robinson and Rawnsley as an alternative to the classical Kostant-Souriau quantization procedure with half-form correction. Given a metaplectic-c quantizable symplectic manifold (M, ω) and a real-valued function H on M, we propose a condition under which a regular value E of H is a quantized energy level for the system (M, ω, H) . This condition is dynamically invariant: if there are two functions on M that share a level set, then the quantization condition over that level set is identical for both functions. We can generalize from one function H to a family of k Poisson commuting functions on M. In the special case of a completely integrable system, the quantization condition is equivalent to a Bohr-Sommerfeld condition. (Received January 17, 2016)