

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Uniform Approximation from Symbol Calculus on a Spherical Phase Space LIANG YU, U.C. Berkeley — We use symbol correspondence and quantum normal form theory to develop a more general method for finding uniform asymptotic approximations. We then apply this method to derive a uniform approximation of the $6j$ -symbol in terms of the rotation matrices. The derivation is based on the Stratonovich-Weyl symbol correspondence between matrix operators and functions on a spherical phase space. The resulting approximation depends on a canonical, or area preserving, map between two pairs of intersecting level sets on the spherical phase space.

Liang Yu
U.C. Berkeley

Date submitted: 10 Nov 2011

Electronic form version 1.4