

Symbols on the Sphere

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Abstract

The subject of this poster is recent investigations we have done into symbol correspondences and star products on the sphere. The most satisfactory symbol correspondence is the Stratonovich-Weyl (S-W) symbol correspondence, which arises from five postulates. We have continued the asymptotic expansion of this symbol begun by Freidel and Krasnov. We have found a basis of rotationally invariant bidifferential operators and have expanded the S-W product in these operators. We have compared these results with Fedosov quantization, which is a geometrically natural construction in deformation quantization.