

Berezin transform on the harmonic Fock space

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Abstract

The standard Berezin-Toeplitz quantization is based on the asymptotic expansion of the Berezin transform, associated to weighted spaces of square-integrable holomorphic functions (weighted Bergman spaces), as the weight parameter tends to infinity in an appropriate way. We discuss an extension of this result to spaces of harmonic, rather than holomorphic, functions, in particular to the case of the harmonic Segal-Bargmann-Fock space on \mathbf{C}^n .

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