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**Functional Calculi Generated by Clifford-Hermite Wavelets**

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**Abstract.** Clifford-Hermite Continuous Wavelet Transforms are used to construct a new kind of functional calculus for bounded non-commuting operators. The Weyl calculus can be reobtained from this model. The correspondences between Clifford-Hermite wavelets and functional calculi of operators are discussed in order to obtain operator-valued kernel functions. The functional calculi are then constructed by means of the reconstruction formulae.

**Keywords.** Clifford-Hermite polynomial, Clifford-Hermite continuous wavelet transform, functional calculus, Weyl calculus.

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