

WIGNER-VILLE DISTRIBUTION ASSOCIATED WITH QUADRATIC CLIFFORD-FOURIER TRANSFORM

Hakim Monaim

(Moulay Ismail University, Meknes. Morocco)

E-mail: monaim.hakim@edu.umi.ac.ma

This presentation provides the general double-sided orthogonal $2n-1$ -dimensional spaces split quadratic phase Clifford-Fourier transform and the general Wigner-Ville Distribution quadratic phase Clifford-Fourier transform. It proves the Rènyi and Shannon entropy and Lieb's uncertainty principles.

Keywords: Clifford Algebra; Orthogonal 2D-Planes Split; Clifford-Fourier Transform; Quadratic Phase Clifford-Fourier Transform; Wigner-Ville dDistribution Quadratic Phase Clifford-Fourier Transform.

REFERENCES

- [1] Hitzer, E. (2023). Quadratic Phase Quaternion Domain Fourier Transform. In Computer Graphics International Conference, pages 262-273. Springer.
- [2] Lounesto, P. (2001). Clifford Algebras and Spinors. London Mathematical Society Lecture Note Series. Cambridge University Press, 2 edition.
- [3] Castro, L., Haque, M., Murshed, M., Saitoh, S., and Tuan, N. (2014). Quadratic fourier transforms. Annals of Functional Analysis, 5(1):10-23.