SHAPIRO’S UNCERTAINTY PRINCIPLE RELATED TO
THE WINDOWED FOURIER TRANSFORM ASSOCIATED
WITH THE RIEMANN–LIOUVILLE OPERATOR

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Abstract. Quantitative Shapiro’s dispersion uncertainty principle and umbrella theorem are proved for the windowed Fourier transform associated with the Riemann-Liouville operator.


Keywords and phrases: The windowed Fourier transform, uncertainty principle, Hilbert-Schmidt operator, time-frequency concentration, Fourier transform, dispersion principle, Shapiro’s theorem, Umbrella theorem.

REFERENCES


