

## Study Hankel Transforms and Properties of Bessel Function via Entangled State Representation Transformation in Quantum Mechanics

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Abstract: In Phys. Lett. A 313 (2003) 343 we have found that the self-reciprocal Hankel transformation (HT) is embodied in quantum mechanics by a transform between two entangled state representations of continuum variables. In this work we study Hankel transforms and properties of Bessel function via entangled state representations' transformation in quantum mechanics.

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