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## Review text:

A truly exciting exercise in complex analysis, asymptotic analysis and innovative thinking. The basic idea is inspired by quantum mechanics. Starting from this background the usual probability-density interpretation of wave functions  $\psi(x)$  is assumed transferred to what mathematicians would call the Krein-space context. Briefly, the Krein-space-like inner self-product is defined in the form  $\varrho_{\psi} = \langle \psi | P | \psi \rangle$  evaluated as integral  $\varrho_{\psi} = \int_{C} \psi * (-x) \psi(x) dx$  not necessarily over the real line  $C = C_{real} \equiv R$ ) but over certain *ad hoc* complex curve  $C = C_{\psi} \neq R$  called "eigenpath".

For a few concrete input wave functions the idea is illustrated, in more detail, Numerically. With the latter curves constructed and discussed. It is shown that the corresponding "generalized probability density" may really be kept locally real and positive (this is assumed achieved via the *local* choice of direction of C) plus integrable (so that one can normalize the given  $\psi(x)$  globally to one).

Needless to add: the reader of this text is rewarded by being shown a number of amazing technical tricks (too many for being even listed here) accompanied by a number of some even more amazing speculations about the possible structure of some future "final" physical theory, to be based on the use of similar concepts.