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**Short title:** Comparative analysis of real and  $PT$ -symmetric Scarf potentials.

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**Review text:**

Exactly solvable models have a particular appeal in Quantum Mechanics where there are not that many of them. One of the traditional purposes of their study is pragmatic (typically, in perturbation theory), another one, apparently pursued in paper in question, is expository and pedagogical. The author picks up two popular models of a particle confined in a particular (viz., “scarf”) one-dimensional potential and compares the properties of the bound states generated by their standard versions (manifestly self-adjoint in the Dirac’s sense) and “ $PT$ -symmetric” versions (self-adjoint with respect to a less trivial, non-local and ad hoc constructed scalar product). Amply the author employs the fact that the model is solvable in terms of the Gauss’ hypergeometric functions. This paves the way towards a detection of the presence/absence of the so called quasi-parity quantum number, of the so called  $PT$ -symmetry-breaking couplings at which the energies acquire imaginary components, etc.