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Reviewer: Znojil, Miloslav

Reviewer number:

Address:

NPI ASCR, 250 68 Rez,
Czech Republic
znojil@ujf.cas.cz

Author: Su, Wang-Chang

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Review text:

Although the idea of having a partnership between bosons and fermions (called supersymmetry, SUSY, closely related to the grading of algebras) seems to have failed completely in particle physics, it found a new life as a guide to a partnership of certain exactly solvable and almost isospectral potentials $V^{(\pm)}(x, a_0)$ in nonrelativistic quantum mechanics. Their shape invariance means that $V^{(+)}(x, a_0)$ happens to be equal to $V^{(-)}(x, a_1)$ up to an additive x -independent shift $R(a_0)$. In the paper the possible algebraic structure is sought for this shape invariance mapping after k iterations. In a search for sufficiently simple special cases the author succeeds in finding a user-friendly structure (called potential algebra and equivalent to the generalized deformed oscillator algebra having an interesting grading structure) after having imposed certain extra relations in the problem. A dark side of the beauty of his/her algebraic construction lies, as often, in the parallel loss of isospectrality discovered by Jevicki and Rodrigues [25]. This requires, even at $k = 2$, either the use of an extremely ugly brute-force regularization procedure based on an *ad hoc* change of boundary conditions (cf. the author's comment on the three last lines of page 11), or a not too much less drastic Dyson-mapping change of the representation of the Hilbert space of states which I explained in more detail, e.g., in J. Phys. A: Math. Gen. 37 (2004) 10209 - 10222.