This is a review text file submitted electronically to MR.

Reviewer: Znojil, Miloslav

Reviewer number:

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

Author: Hamzavi, M.; Rajabi, A. A.; Hassanabadi, H.

Short title: Exactly complete solutions of the Dirac equation with pseudoharmonic potential including linear plus Coulomb-like tensor potential.

MR Number: 2786841

Primary classification: 81Q05

Secondary classification(s): 33C90

Review text:

A popular sophomore-level exercise in quantum mechanics, multiply (re)appearing in physics journals. The essence of the message is that the one-dimensional Dirac equation (i.e., the two-component first-order system) is reducible to a single Schroedinger-like ordinary differential equation of the second order. The latter linear eigenvalue problem comprises a confluent hypergeometric family of the well known special cases which are solvable in terms of Laguerre polynomials.