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SCHOLARLY PUBLICATIONS AND CREATIVE ACHIEVEMENTS

ARTICLES (in refereed journals):

- A. Contreras-Astorga** and A. Schulze-Halberg. Recursive representation of Wronskians in confluent supersymmetric quantum mechanics. *Journal of Physics A: Mathematical and Theoretical*, 2017.
- A. Contreras-Astorga**, J. Negro, and S. Tristao. Confinement of an electron in a non-homogeneous magnetic field: Integrable vs superintegrable quantum systems. *Physics Letters A*, 380(1–2):48 – 55, 2016.
- A. Contreras-Astorga** and A. Schulze-Halberg. On integral and differential representations of Jordan chains and the confluent supersymmetry algorithm. *Journal of Physics A: Mathematical and Theoretical*, 48(31):315202, 2015.
- A. Contreras-Astorga** and A. Schulze-Halberg. The generalized zero-mode supersymmetry scheme and the confluent algorithm. *Annals of Physics*, 354(0):353 – 364, 2015.
- D. Bermudez, **A. Contreras-Astorga**, and D. J. Fernández C. Painlevé IV coherent states. *Annals of Physics*, 350(0):615 – 634, 2014.
- A. Contreras-Astorga** and A. Schulze-Halberg. The confluent supersymmetry algorithm for Dirac equations with pseudoscalar potentials. *Journal of Mathematical Physics*, 55(10):–, 2014.
- A. Contreras-Astorga**, D. J. Fernández C., and J. Negro. Solutions of the Dirac equation in a magnetic field and intertwining operators. *SIGMA*, 082(1):10 pages, 2012.
- A. Contreras-Astorga** and D. J. Fernández C. Coherent states for the asymmetric Penning trap. *International Journal of Theoretical Physics*, 50(7):2084–2093, 2011.
- A. Contreras-Astorga**, D. J. Fernández C., and M. Velázquez. Coherent states for quadratic Hamiltonians. *Journal of Physics A: Mathematical and Theoretical*, 44(3):035304, 2011.
- A. Contreras-Astorga** and D. J. Fernández C. Supersymmetric partners of the trigonometric Pöschl–Teller potentials. *Journal of Physics A: Mathematical and Theoretical*, 41(47):475303, 2008.

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