

Missouri University of Science and Technology Scholars' Mine

Physics Faculty Research & Creative Works

Physics

01 Aug 2004

Erratum: Test of the Pluvinage Wave Function for the Helium Ground State (Physical Review A - Atomic, Molecular, and Optical Physics (2004) 70 (012712))

Darryl B. Jones

Joseph H. Macek

Don H. Madison Missouri University of Science and Technology, madison@mst.edu

Follow this and additional works at: https://scholarsmine.mst.edu/phys_facwork



Part of the Physics Commons

Recommended Citation

D. B. Jones et al., "Erratum: Test of the Pluvinage Wave Function for the Helium Ground State (Physical Review A - Atomic, Molecular, and Optical Physics (2004) 70 (012712))," Physical Review A - Atomic, Molecular, and Optical Physics, vol. 70, no. 2, American Physical Society (APS), Aug 2004. The definitive version is available at https://doi.org/10.1103/PhysRevA.70.029902

This Erratum is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in Physics Faculty Research & Creative Works by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact scholarsmine@mst.edu.

Publisher's Note: Test of the Pluvinage wave function for the helium ground state [Phys. Rev. A 70, 012712 (2004)]

S. Jones, Joseph H. Macek, and D. H. Madison (Received 3 August 2004; published 19 August 2004)

DOI: 10.1103/PhysRevA.70.029902 PACS number(s): 34.80.Dp, 32.80.Cy, 32.80.Fb, 31.10.+z, 99.10.Fg

This paper was published online on 29 July 2004 with a formatting error in Eq. (12). Equation (12) should read

$$\begin{split} E_{n_1,n_2,k} &\equiv k^2 - \frac{Z^2}{2} \left(\frac{1}{n_1^2} + \frac{1}{n_2^2} \right) + Z \Bigg[\left(\frac{1}{2} + ik \right) \frac{{}_1F_1(2 - i\,\eta,3\,;2ikr_{12})}{{}_1F_1(1 - i\,\eta,2\,;2ikr_{12})} - ik \Bigg] \Bigg[\left\{ \frac{1}{n_1} + \left(1 - \frac{1}{n_1} \right) \frac{{}_1F_1\bigg(2 - n_1,3\,;\frac{2Zr_1}{n_1}\bigg)}{{}_1F_1\bigg(1 - n_1,2\,;\frac{2Zr_1}{n_1}\bigg)} \right\} \frac{r_1^2 + r_{12}^2 - r_2^2}{2r_1r_{12}} \\ &+ \left\{ \frac{1}{n_2} + \left(1 - \frac{1}{n_2} \right) \frac{{}_1F_1\bigg(2 - n_2,3\,;\frac{2Zr_2}{n_2}\bigg)}{{}_1F_1\bigg(1 - n_2,2\,;\frac{2Zr_2}{n_2}\bigg)} \right\} \frac{r_2^2 + r_{12}^2 - r_1^2}{2r_2r_{12}} \Bigg]. \end{split}$$

It has been corrected as of 6 August 2004. The text is correct in the printed version of the journal.