WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL

RESULTS AND RESULTS OF THE SHREDINGER TESTING IN THE CENTRAL BASE FOR DEYTRON YADROSI

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ABSTARCT

The deutron consists of a single proton, a netron ${}_1^2H$ - a hydrogen isotope. The mass of the masses A = 2, the charge Z = 1, the bonding energy E = 2.22 MeV, $\mu\left({}_1^2H\right)=0{,}86\mu_{ya}$ the magnetic moment of the spin and the pair, the kwadarupole moment is the nucleus, $\varepsilon=1{,}11\ \ MeV$ the bonded nucleus. Let's take a look at the Shredinger equation for nucleons moving in the center to explain the state of the deutron nucleus and to obtain discrete energy values. Due to the fact that nuclear forces have not yet fully studied the mechanism of interaction, they have created a unique nuclear model.

We consider the shredinger equation for the center of the potential derivative for the nucleus of zebras:

Shredinger equation with gamilton operator:

$$\hat{H}\psi=E\psi,\quad \hat{H}=\hat{T}+U(r) \qquad (1)$$

$$\Delta\psi(x,y,z)+\frac{2\mu}{\hbar^2}\left[E-U(r)\right]\psi(x,y,z)=0 \qquad (2)$$

- We select the potential potential for the nucleus:

$$U_r(r)=\begin{cases}-U_0,(r<R)\\0,(r<R)\end{cases} \qquad (3)$$

$$U_{oc}(r)=\begin{cases}\frac{\mu\omega^r r^r}{2},(r<R)\\ 0,(r<R)\end{cases} \quad (4)$$

(r <R) of the general potential area for the field is as follows: (3) and (4):

$$U(r)=U_r(r)+U_{jc}(r)$$

$$U(r<R)=-U_0\frac{\mu\omega^r r^r}{2} \quad (5)$$

Let's put it into the general potential area

$$k^2(r)=\frac{2\mu(E+U_0)}{\hbar^2}-\frac{\mu\omega^r r^r}{\hbar^2}r^r=k_0{}^2(r)-\frac{\mu\omega^r r^r}{\hbar^2}r^r \quad (6)$$

$$f(y)=C(y)\exp(-\tfrac{y^2}{2}) \quad (7)$$

(7) - the first and second order differentials of the formulas (function), and the result generated by (6) is the following:

$$\frac{\partial^2 C(y)}{\partial y^2}+\left(\frac{2\alpha}{y}-2y\right)\cdot\frac{\partial C(y)}{\partial y}+(\varepsilon-2a-1)C(y)=0 \quad (8)$$

In the equation (8) we call the solution C (y) - a sequence of functions:

$$C(y)=\sum_{\mu=0}^{n}b_\mu y^{\mu+2} \quad (9)$$

(9) The function C (y) is the first and second sequence of elements to get.

$$\left.\begin{aligned}\frac{\partial C(y)}{\partial y}&=\sum_{\mu=0}^{n}(\mu+2)b_{\mu}y^{\mu-1}\\ \frac{\partial^{2}C(y)}{\partial y^{2}}&=\sum_{\mu=0}^{n}(\mu+2)(\mu-1)b_{\mu}y^{\mu}\end{aligned}\right\} \tag{10}$$

(10) - formula (8) - we have the following line in the equation:

$$\sum_{\mu=0}\{(\mu+1)(\mu+2)\}b_{\mu}y^{\mu}\Big|_{\substack{b_o=0\\ b_1=0}}=\sum_{\mu=0}\{\varepsilon 2a-1-2(\mu+2)\}b_{\mu}y^{\mu+2}=0 \tag{11}$$

$$\sum_{\mu=0}\{(\mu+1)(\mu+2)\}b_{\mu}y^{\mu}\Big|_{\substack{b_o=0\\ b_1=0}}=\sum_{\mu=0}\{\varepsilon 2a-1-2(\mu+2)\}b_{\mu}y^{\mu+2}=0 \tag{11}$$

$$\sum_{\mu=0}\{(\mu+1)(\mu+2)+2a(\mu+2)\}b_{\mu}y^{\mu}\Big|_{\substack{b_o=0\\ b_1=0}}=\sum_{\mu=0}\{(\mu+3)(\mu+4)+2a(\mu+4)\}b_{\mu+2}y^{\mu} \tag{12}$$

(12) is the following link between the linear equation $b_{\mu+2}$ and b_{μ} the coefficient:

$$b_{\mu+2}=b_{\mu}\frac{2a+1+2(\mu+2)-\varepsilon}{(\mu+3)(\mu+4)+2a(\mu+4)} \tag{13}$$

$R=\lim\limits_{R\to}\frac{b_{\mu+1}}{b_{\mu}}$ is the constant value of R

(13) is closer to one another:

$$b_0>b_1>b_2>b_3>\ldots.b_{\mu}>b_{\mu+1}>b_{\mu+2}>\ldots..$$

Here's how we write the coefficient of recurrence:

$$b_{\mu+1}=0 \quad b_{\mu}\frac{2a+1+2(\mu+2)-\varepsilon}{(\mu+3)(\mu+4)+2a(\mu+4)}=0 \tag{14}$$

(14) denotes the equation

$$\varepsilon = 2a + 1 + 2(\mu + 2)$$

$$\frac{2(E + U_0)}{\hbar\omega} = 2\alpha + 1 + 2(\mu + 2) \qquad (15)$$

(15) The equation of E - energy without equation is:

$$E = \frac{\hbar\omega}{2}\{2\alpha + 1 + 2(\mu + 2)\} - U_0 = \hbar\omega\left[\alpha + \frac{1}{2} + \mu + 2\right] - U_0$$

If $\alpha = l + 1$ yes

$$E = \hbar\omega\left[l + 1 + \frac{1}{2} + \mu + 2\right] = \hbar\omega\left[l + \mu + 2 + \frac{3}{2}\right] \qquad (16)$$

If we introduce the equation (16), then the final equation of the equation is:

$$E = \hbar\omega\left[n_0 + \frac{3}{2}\right] \qquad (17)$$

(17) is the number of the major oscillator quantum in equation.

Since the deutron is spin and pair in $I^{\pi} = 1^{+}$ the basic case, the total orbital spin of the proton and neutron should be 1.Nucleons can be parallel to s-position (l = 0), can not be antiparallel. Since the pair of deutrones is pair, s and d (l = 0, l = 2) can only exist, and in p-position (l = 1).

In summary, the dedra- tion interferes with the effects of the non-central forces. Nucleons can be used to move magnetically in d orbit. It is clear if the magnetic torque is about 4% of the settled nucleon d orbit.

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