The onduscular equation $\frac{2m}{\hbar^2}(E-U(r))rf(r,t)+\frac{R}{r}\frac{\partial^2(rf(r,t))}{\partial r^2}=\frac{1}{V^2}\frac{\partial^2 rf(r,t)}{\partial t^2}$ (1) is valid in both spherical and cylindrical coordinates it emerges from a combination of Schrodinger which is the first degree with respect to time and Klein-Gordon temporal equation of the second degree with respect to time. Also we chose a parameter R thus for a small radius r_{Bohr}, for atomic value to coincide with the Schrodinger equation exactly and predict the evolution of wave function to huge values of r about the galactic distances. The wave function of the Schrodinger equation has the supposition that is null at infinity, is normed, has the dimension of $[L^{-3/2}]$, and predicts the probability of the existence of the microparticle in volume dV. Schrodinger's equation is (2):

$\frac{2m}{\hbar^2}(E-U(r))f(r,t)+\frac{\partial^2(f(r,t))}{\partial r^2}=ih\frac{\partial f(r,t)}{\partial t}$ & Klein-Gordon is $\frac{2m}{\hbar^2}f(r,t)+\frac{\partial^2(f(r,t))}{\partial r^2}=\frac{1}{c^2}\frac{\partial^2 f(r,t)}{\partial t^2}$ (3) thus eq (1) for m = 0 is a wave equation with variable parameters and seems to be true. $\frac{R}{r}\frac{\partial^2(rf(r,t))}{\partial r^2}=\frac{1}{V^2}\frac{\partial^2 rf(r,t)}{\partial t^2}$ (4) but all 3 equations are different also wave equation is not satisfactory $\frac{\partial^2(f(r,t))}{\partial r^2}=\frac{1}{c^2}\frac{\partial^2 f(r,t)}{\partial t^2}$ (5),

$\frac{2m}{\hbar^2}(E-U(r))rf1(r,t)+\frac{R\partial^2(rf1(r,t))}{r\partial r^2}=\frac{\partial^2 rf1(r,t)}{V^2\partial t^2}$ and f1(r,t)= g(r)u(t) thus

$\frac{2m}{\hbar^2}(E-U(r))rg(r)u(t)+\frac{R\partial^2(rg(r)u(t))}{r\partial r^2}=\frac{\partial^2(rg(r)u(t))}{V^2\partial t^2}$

$\frac{2m}{\hbar^2}(E-U(r))rg(r)u(t)+u(t)\frac{R\partial^2 rg(r)}{r\partial r^2}=\frac{rg(r)\partial^2 u(t)}{V^2\partial t^2}$ and separating variables

$\frac{2m}{\hbar^2}(E-U(r))+\frac{R}{g(r)r^2}\frac{\partial^2(r\cdot g(r))}{\partial r^2}=\frac{1}{u(t)\cdot V^2}\frac{\partial^2 u(t)}{\partial t^2}$ thus $\frac{1}{u(t)\cdot V^2}\frac{\partial^2 u(t)}{\partial t^2}=k^2$ with the solution:

$u(t)=\sinh(Vkt)$ (7) $\frac{2m}{\hbar^2}(E-U(r))+\frac{R}{g(r)r^2}\frac{\partial^2(r\cdot g(r))}{\partial r^2}=k^2$

$\frac{2m}{\hbar^2}[(E-U(r))-\frac{\hbar^2}{2m}k^2]\cdot g(r)+\frac{R}{r^2}\frac{\partial^2(r\cdot g(r))}{\partial r^2}=0$ thus

$\frac{2m}{\hbar^2}[(E-U(r))-\frac{\hbar^2}{2m}k^2]\cdot g(r)+\frac{R}{r^2}\frac{\partial^2(r\cdot g(r))}{\partial r^2}=0$ & $u(t)=\sinh(Vkt)$ so we calculate k that should be for any small r almost equal to Schrodinger $\frac{2m}{\hbar^2}(E-U(r))\cdot g(r)+\frac{1}{r}\frac{\partial^2(r\cdot g(r))}{\partial r^2}=0$ & $u(t)=e^{-\left(\frac{i}{\hbar}\right)Et}$

Thus we have substitute rg(r)u(t) = f_1(r,t) thus: $\frac{2m}{\hbar^2}(E-U(r))f_1(r,t)+\frac{R}{r}\frac{\partial^2(f_1(r,t))}{\partial r^2}=\frac{1}{V^2}\frac{\partial^2 f_1(r,t)}{\partial t^2}$

This is the equation for any micro particle that we take for granted we obtain equation (1) also for v = c thus m = 0 we have equation (5) see: http://www.michaelvio.byethost8.com/QFT.pdf

The effective wave function of the onduscular equation has the supposition as null at R (or 2R) is normed, has the dimension of $[L^{-3/2}]$, and predicts the probability of the existence of the micro particle in volume dV. Also, a condition of the derivate = R in origin verifies the condition that the speed of interaction has the velocity V whatever will be that. The value of $R = 3.922833072\cdot10^{22}$ m thus 4.146526391 millions of Lightyears is calculated in wes.pdf

The change of variable from Schrodinger to QFT Document

Thus we have:

$$R=\frac{1+\frac{L^2}{r_b\hbar^2}}{8\pi\varepsilon}=\frac{1+\frac{l(l+1)}{r_b}}{8\pi\varepsilon}=\frac{r_b+l(l+1)}{r_b 8\pi\varepsilon}\cong\frac{l(l+1)}{r_b 8\pi\varepsilon}$$

Where rb is radius Bohr and ε is vacuum permittivity and the value of "l" angular momentum quantum number should be 21. In the periodic table with 118 elements that we know, the principal quantum number "n" varies from 1 to 5 but theoretically, n should vary from n=1… ∞ (infinity), and the link to "l" is that l varies from 0… n-1. Is a little peculiar that the value of "l" should be 21 thus the principal quantum number n = 22 but it fits to dowsing measurement and gives a proper value to R equal to $R = 3.922833072\cdot10^{22}$ m thus 4.146526391 millions of Lightyears.