## **Experimental Test of Quantum Mechanics versus Circlon Nuclear Structure**

by James Carter

The Circlon Model of Nuclear Structure is basically a series of geometrical equations that provide a precise mechanical electron-proton and neutron structure for the atoms of each element in the periodic table. It also dictates the individual placement of neutrons within the elements' nearly 2000 stable and unstable isotopes. The various structural layers of protons and mesons within these circlon models correspond closely to the external electron shell configurations measured and calculated by quantum field electrodynamics. Up until Palladium, the circlon model has the same electron shell configurations as calculated by quantum field equations. This proposed experimental measurement can decisively show a clear difference between the circlon model of nuclear structure and the electron shell predictions of quantum mechanical theories of the atom.

At this 46th element, a significant change occurs between the electron shells of these two models. In the quantum field model prediction, the transformation from Rhodium to Palladium occurs when a new electron is captured by the N-shell and one electron drops from Rhodium's O-shell down into the N-shell. This leaves both the N-shell and M-shell with 18 electrons each. Without a physical model to work from, the quantum field equations just follow the logical pattern of shell structures established in the 45 previous elements.

In the circlon model of nuclear structure there is a clear structural feature within the Palladium nucleus that reveals a different electron shell configuration. In the circlon transformation, a new proton is captured by the M-layer and then the proton from Rhodium's O-layer also drops down into the M-layer of protons. This completes the M-layer at 20 protons and leaves the N-layer with 16. Each layer of protons within the nucleus corresponds to the atom's external electron shells.

Within the nucleus, the M-layer of protons begins at Sodium and continues until Copper where it has 18 protons. For reasons that are somewhat unclear, the M-layer stops forming at this point even though it still needs two more protons to make it complete. With Zinc, the N-layer continues to form until it reaches Rhodium with 16 protons. It is here, in the transition to Palladium, that the M-layer receives the last two protons needed for its completion.

This configuration is the only way to preserve the integrity of the circlon model of atomic structure. These last two protons must thus drop down into the next lower M-layer of Palladium's proton structure. No conceivable change in the circlon structural model would allow for these two protons to reside in Palladium's N-layer. There is simply no other place within the structure to fit in these protons.

This same situation occurs in the nuclear transformation from Platinum to Gold where two electrons drop down into the N-shell in the circlon model instead of into the O-layer in the quantum field model.

The experimental measurements necessary to determine the exact structures of these two possible electron shell configurations are very complex and would likely require a particle ac-



celerator. When I inquired at the Fermi Laboratory to see if such precise measurements of electron shells had ever been made, I received very little response. Then, after several letters back and forth, I was told that it was nonsense to consider any such experiments that might cast doubt on quantum field mechanics.

However, I am certain that it is possible to perform the delicate experiments needed to differentiate between the predictions of these two electron shell models. I would believe that these exacting measurements could be most easily done with Gold instead of Palladium because pure Gold has only one stable isotope whereas Palladium is a mixture of six.

This same divergent transition in structural layers also occurs when Darmstadtium gains a proton and becomes Roentgenium. However, any kind of a test would be virtually impossible since Darmstadtium has a half life of 4 minutes and Roentgenium's is only 10 minutes.

If such tests with either Palladium or Gold confirmed the circlon model's predictions of electron shell configurations, they would provide the evidence needed to elevate the circlon shape from an invention to a discovery. Moreover, if the circlon shape could predict the electron shell structures of Palladium, Gold, and even Roentgenium better than the strong force and the quantum field equations, it would become a measured discovery. I also have no doubt that the quantum field enthusiasts would be able to adjust their flexible equations to fit the new measurements; however that would only show the compatibility of their equations with the circlon model's equations and thereby confirm the circlon model. The circlon model is actually just a shorthand version of quantum mechanical equations in which the circlon shape is produced by their probability calculations.

If these electron shell tests could confirm the circlon model, it would have an enormous effect on experimental particle physics. This test would establish the difference between an atom that we could see

Electron Shells Predicted								
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	кт.	м	N	0	Р	0		
1 Н	1 -	7	7	ĩ	-	z		
2 He	2 '			÷				
3 Li	2-1							
4 Be	2-2							
5 B	2-3		1					
6 C	2-4		1					
7 N	2-5	1	1					
8 0	2-6							
9 F	2-7							
10 Ne	2-8		÷	1				
11 Na	2-8-	1	÷	1				
12 Mg	2-8-	2	i.	1				
14 Si	2-8-	4						
15 P	2-0-	5		÷				
16 S	2-8-	6						
17 Cl	2-8-	7						
18 Ar	2-8-	8						
19 K	2-8-	8-	1					
20 Ca	2-8-	8-	2					
21 Sc	2-8-	9-	2					
22 Ti	2-8-	10-	2	1				
23 V	2-8-	11-	2					
24 Cr	2-8-	13-	1*	1				
25 Mn	2-8-	13-	2	1				
26 Fe	2-8-	14-	2	1				
27 CO	2-8-	15-	2					
28 NI 20 Gu	2-8-	10-	2	÷				
29 Cu 30 Zn	2-8-	18-	2	÷				
31 Ga	2-8-	18_	2					
32 Ge	2-0-	18-	4					
33 As	2-8-	18-	5					
34 Se	2-8-	18-	6					
35 Br	2-8-	18-	7					
36 Kr	2-8-	18-	8					
37 Rb	2-8-	18-	8-	1				
38 Sr	2-8-	18-	8-	2				
39 Y	2-8-	18-	9-	2				
40 Zr	2-8-	18-	10-	2				
41 Nb	2-8-	18-	12-	1*				
42 Mo	2-8-	18-	13-	1				
43 TC	∠-8- 2 9	10- 10	エゴー 15	2 1+				
44 KU 45 Rh	2-8-	18.	16.	1 ×				
46 Pd	2-0-	18-	18-	⊥ 0*				
10 10	KL	м	N	ŏ				
Standar	d Mode	l Pa	lladi	um				
46 Pd	2-8-	20-	16-	-0				
Circlo	n mod	el P	alla	diu	m			
Standa	rd mod	lel (	Gold					
	KL	М	N	C	P			
79 Au	2-8	-18	-32	2-1	8-1			
79 Au	2-8	-20	-32	2-1	6-1			
Circlo	n Mod	el C	fold					
a								
Standa	rd mod	lel F	loer	itge	nıuı	n		
	K	L	MI	N	0	PQ		
111 R	g 2-	8-1	8-3	52-	32-	16 1		
TTT K	9 2-	<b>3-2</b>	0-3	- 2	<u>52-</u>	10-1		

and touch and an alternative atom composed of churning forces, fields, quarks, quirks, and uncertainties. Many fields have been calculated with various equations but none have ever been actually measured with Newtonian measuring instruments. With an accurate mechanical model of the atom and nucleus to work with, scientists could use computers to build virtual particle accelerators that could compare the calculated parameters of particles with the measurements made with real accelerators.

Elecron Shells of	Elecron Shells of			
Standard Model	Circlon Model			
KLMN O P	Q	KLMNOP	Q	
Ag 2-8-18-18- 1	Ag	2-8-20-16-1		
Cd 2-8-18-18- 2	Cd	2-8-20-16-2		
In 2-8-18-18- 3	In	2-8-20-16-3		
Sn 2-8-18-18- 4	Sn	2-8-20-16-4		
Sb 2-8-18-18- 5	Sb	2-8-20-16- 5		
Te 2-8-18-18- 6	Te	2-8-20-16- 6		
I 2-8-18-18- 7	I	2-8-20-16- 7		
Xe 2-8-18-18- 8	Xe	2-8-20-16- 8		
Cs 2-8-18-18- 8- 1	Cs	2-8-20-16- 8- 1		
Ba 2-8-18-18- 8- 2	Ba	2-8-20-16- 8- 2		
La 2-8-18-18- 9- 2	La	2-8-20-16- 9- 2		
Ce 2-8-18-20- 8- 2*	Ce	2-8-20-18- 8- 2*		
Pr 2-8-18-21- 8- 2 Nd 2-8-18-22- 8- 2 Pm 2-8-18-23- 8- 2 Sm 2-8-18-24- 8- 2	Pr Nd Pm Sm	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Eu 2-0-10-23- 0- 2 Gd 2-8-18-25- 9- 2 Tb 2-8-18-27- 8- 2* Dy 2-8-18-28- 8- 2 Ho 2-8-18-29- 8- 2	Eu Gd Tb Dy Ho	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Er 2-8-18-30- 8- 2 Tm 2-8-18-31- 8- 2 Yb 2-8-18-32- 8- 2 Lu 2-8-18-32- 9- 2	Er Tm Yb	2-8-20-28-8-2 2-8-20-29-8-2 2-8-20-30-8-2 2-8-20-30-9-2		
Hf 2-8-18-32-10- 2	Hf	2-8-20-30-10- 2		
Ta 2-8-18-32-11- 2	Ta	2-8-20-30-11- 2		
W 2-8-18-32-12- 2	W	2-8-20-30-12- 2		
Re 2-8-18-32-13- 2	Re	2-8-20-30-13- 2		
Os 2-8-18-32-14- 2	Os	2-8-20-30-14- 2		
Ir 2-8-18-32-15- 2	Ir	2-8-20-30-15- 2		
Pt 2-8-18-32-16- 2	Pt	2-8-20-30-16- 2		
Au 2-8-18-32-18- 1*	Au	2-8-20-32-16- 1*		
Hg 2-8-18-32-18- 2 Tl 2-8-18-32-18- 3 Pb 2-8-18-32-18- 3 Bi 2-8-18-32-18- 4 Bi 2-8-18-32-18- 5	Hg Tl Pb Bi	2-8-20-32-16- 2 2-8-20-32-16- 3 2-8-20-32-16- 4 2-8-20-32-16- 5		
Po 2-8-18-32-18- 6	Po	2-8-20-32-16- 6	1	
At 2-8-18-32-18- 7	At	2-8-20-32-16- 7		
Rn 2-8-18-32-18- 8	Rn	2-8-20-32-16- 8		
Fr 2-8-18-32-18- 8-	1 Fr	2-8-20-32-16- 8-		
Ra 2-8-18-32-18- 8-	2 Ra	2-8-20-32-16- 8-	2	
Ac 2-8-18-32-18- 9-	2 Ac	2-8-20-32-16- 9-	2	
Th 2-8-18-32-18-10-	2 Th	2-8-20-32-16-10-	2	
Pa 2-8-18-32-20- 9-	2* Pa	2-8-20-32-18- 9-	2*	
U 2-8-18-32-21- 9-	2* U	2-8-20-32-19- 9-	2*	
Np 2-8-18-32-22- 9-	2* Np	2-8-20-32-20- 9-	2*	
Pu 2-8-18-32-24- 8-	2* Pu	2-8-20-32-22- 8-	2*	
Am 2-8-18-32-25- 8-	2 Am	2-8-20-32-23- 8-	2	
Cm 2-8-18-32-25- 9-	2 Cm	2-8-20-32-23- 9-	2	
Bk 2-8-18-32-27- 8-	2* Bk	2-8-20-32-25- 8-	2*	
Cf 2-8-18-32-28- 8-	2 Cf	2-8-20-32-26- 8-	2	
Es 2-8-18-32-29- 8-	2 Es	2-8-20-32-27- 8-	2	
Fm 2-8-18-32-30- 8-	2 Fm	2-8-20-32-28- 8-	2	
Md 2-8-18-32-31- 8-	2 Md	2-8-20-32-29- 8-	2	
No 2-8-18-32-32- 8-	2 No	2-8-20-32-30- 8-	2	
Lr 2-8-18-32-32- 9-	2 Lr	2-8-20-32-30- 9-	2	
2-0-18-32-32-10-	2	Z-0-20-32-30-10-	2	
KLMNOP	Q	KLMNOP	Q	



If careful measurements of the electron shell configurations of the Palladium atom are able to confirm the circlon model of nuclear and atomic structure then this same circlon model can be used to predict the exact temperature of the 2.7°K Cosmic Blackbody Radiation.

## A Definitive Test for the Cosmic Transformation of Electron Mass

This test shows how the measurement of the electron's decreasing mass combined with the circlon shape of electrons and protons make it possible to predict the exact temperature of the Cosmic Blackbody Radiation.

The fact that the mass of the electron has been decreasing since before the Big Bang is easily measured in several ways. In general terms, this effect has been detected in electron measurements going back to the early 1900's. Until recently, these measurements have been somewhat erratic due to constantly improving measurement techniques. Although they show the effect, they are unable to determine the speed at which electron mass decreases. With today's modern instruments that get more accurate all the time, it may be possible to measure this speed with just a few years of repeated measurement. Since the Bohr radius and the fine structure ratio also change with the mass of the electron, these parameters may also be used to experimentally measure this effect.

So far, the most accurate measurements of the speed of electron mass decrease are the extensive astronomical observations designed to measure the Hubble constant. Measurements of electrodynamics show that as the mass of the electron decreases, it causes the wavelengths of atomic spectra to decrease. When we view highly red shifted spectral photons from distant galaxies, we are seeing radiation from the same ordinary atoms that we have here on Earth. The difference is that, in the distant past, all atoms had heavier electrons and emitted photons with longer wavelengths. The Hubble constant is a measure of the expanding electron. It is not a measure of an expanding universe.

Another way to measure the speed of electron mass decrease is by studying the intensity of photons from the most distant of supernovas. These supernovas are from the very distant past when the electron was much heavier than it is today. When these explosions occurred, all of the spectral photons produced had much longer wavelengths than they would in a supernova today. These much less energetic photons would produce a supernova that was cooler and less intense than a local one. A number of these measurements have been made and show in general that this supernova cooling is compatible with measurements of the Hubble constant.

The transformation of electron mass is not a theory but a principle of measurement. To reveal the true meaning and purpose of this effect it must be shown to explain seemingly unconnected experimental measurements. One way to do this is to connect this effect to the electrodynamics measured in both the electron shell structure and the neutron dynamics calculated with the circlon model of nuclear structure.