

ARTICLE 02

BOHR MODEL WITH VICTORIA EQUATION: THREE DIMENSIONS. ORBITAL AND SPIN (INTRODUCTION)

Javier Silvestre

victoriaequation@hotmail.com

ABSTRACT

Bohr's atomic model presents problems such as loss of energy by rotating charge or absence of explanation for electron probability (electron cloud). Here we show resolution of these problems and optimization of Bohr's model with two electronic extremes that always maintaining initial energy. Electronic extreme behaviour is based on Victoria equation [1]. Debate between the current model and the one based on Bohr with Victoria equation is proposed.

In this article, electron begins to show in three dimensions. First, by expanding its radial dimension to two dimensions with a circular orbit movement. Second, reaching three dimensions by raising and lowering these circular orbits with division variations (Swinging movement). In the previous sentence two electron movements have been included: orbital movement with circular movement in specific division and spin movement when moving between orbits changing division with swinging movement like a screw.

KEYWORDS

Electron, Atomic model, Victoria Equation, Electronic Extreme (EE), Orbital circumference (c_i), Circular orbit height (H_i), Orbital Planes Axis (OPA), Orbital and Spin movement in EE.

INTRODUCTION

This is second article of 24 dedicated to atomic model based on Victoria equation and excited states with LAN (Articles index is at end). Atomic model with two electronic extremes represents Bohr model development. First nine articles dedicated to this new model are summarized and divided into four points:

- 1) Radial energy with two electronic extremes [1]
- 2) From one dimension to three dimensions (present article)
- 3) Geometry and probability [7,9]
- 4) Geometric and probabilistic coupling as n function [10,13]

Radial energy with two electronic extremes [1]

Two electronic extremes with its swinging move away and approach alternately with respect to atomic nucleus and this provide electron delocalization (electron cloud). This swinging movement is performed in energetic equilibrium between both electronic extremes. Energetic equilibrium prevents orbit movement from being accompanied by energetic loss due to irradiation to outside. Electron distributes its energy in two

electronic extremes (EE) that are placed on both pivot position sides: one oscillates nearer and with more energy (B intern electronic extreme or EE_B) and another more remote and with less energy (A extern electronic extreme or EE_A). Where suffix indicates electronic extreme considered and i suffix is used to both electronic extremes (EE_i). All abbreviations are compiled at article end.

14 postulates are provided prior to Victoria Equation [1]. Victoria Equation is obtained after initial postulates. (A.1) development with kinetic and potential energies of Bohr orbits is (A.2) and only difference is electron substitution for electronic extreme (EE):

$$(A.1) E_o = Ek_A + Ep_A + Ek_B + Ep_B$$

$$(A.2) E_o = -\frac{Kzq_p/q_{eA}}{r_A} + \frac{m_A Kzq_p/q_{eA}}{2m_A r_A} - \frac{Kzq_p/q_{eB}}{r_B} + \frac{m_B Kzq_p/q_{eB}}{2m_B r_B}$$

F common factor (A.3) is extracted (A.4). F is a constant multiplied by z.

$$(A.3) F = \frac{Kq^2}{2} z = fz = 1,15353856 \cdot 10^{-28} z$$

$$(A.4) E_o = F \left(-\frac{1}{r_A} + \frac{1}{2r_A} - \frac{1}{r_B} + \frac{1}{2r_B} \right)$$

Development leads to equation (A.5):

$$(A.5) E_o = -F \frac{r_A + r_B}{2r_A r_B}$$

(A.5) has 2 unknowns (r_A and r_B) that are reduced to one (A.6) by (A.7) corresponding to P06 Initial Energy wavelength divisions.

$$(A.6) E_o = -F \frac{r_A + \left(r_A - \frac{\lambda}{d} \right)}{2r_A \left(r_A - \frac{\lambda}{d} \right)}$$

$$(A.7) r_B = r_A - \frac{\lambda}{d}$$

Victoria Equation equals zero is given by (A.8).

$$(A.8) 2E_o r_A^2 + \left(2F - \frac{2E_o \lambda}{d} \right) r_A - \frac{F \lambda}{d} = 0$$

Negative sign preceding square root is selected (A.9) because positive sign implies r_B is negative and other consequences without physical sense.

$$(A.9) r_A = \frac{-F + \frac{E_o \lambda}{d} - \sqrt{F^2 + \frac{E_o^2 \lambda^2}{d^2}}}{2E_o}$$

Log(d) vs. r_i

Log(division) vs. r_i may appear that axes are inverted if is considered that division is the one that implies r_i (A.9). The reason is that, with axes reversed, representation provides reminiscences to radial charge density (radial probability) (**Figure 1**) and therefore, this fact already implies first success with Bohr electron delocalization (Ground state of Hydrogen in Bohr model is located in single orbit at approximately 0.529 Å of the nucleus). Curve shape with a softer drop after the maximum is also in accordance with current studies on electronic probability. In order that these reminiscences do not lead to error, is important to note:

- a) Division plays a prominent role in electron Probability, but is not Probability.
- b) Maximum probability occurs when d → ∞, but only for Hydrogen (and in general for 1s electron). All other electrons have their maximum probability for r_A greater that (r_i)_{d→∞}

Argon 1s, 2s and 3s are in **Figure A.1**. Initial Energy (E_o) is Ionization Energy (IE) and are given by [14]. Radius when d → ∞ has good agreement with radii equated to the outermost maximum of the 1-electron charge densities of electrons in the various shells in neutral atoms [15] (**Table A.1**). The simple relation with (r_i)_{d→∞} is correct only for type 1s as previously commented.

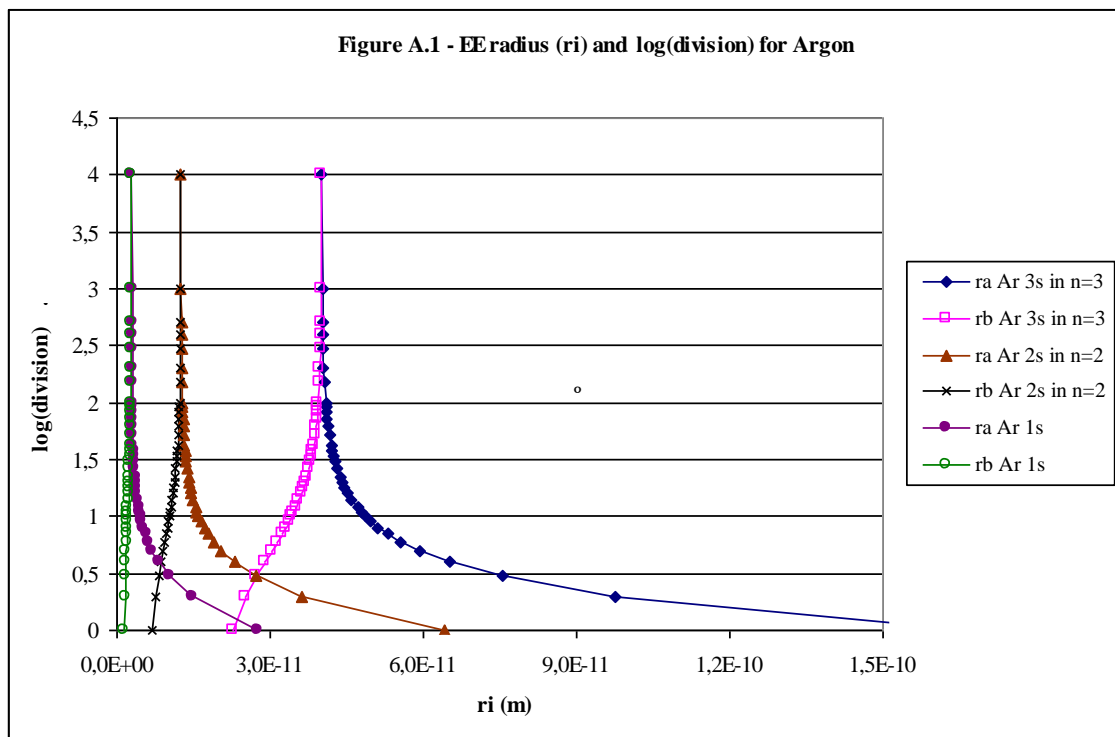


Table A.1 - Comparison between $(r_i)_{d \rightarrow \infty}$ and [15]					
Atom	Lithium		Argon		
Electron	1s	2s	1s	2s	3s
$(r_i)_{d \rightarrow \infty}$ (A)	0,176	1,335	0,029	0,125	0,401
r maximum charge densities (A) [14]	0,186	1,586	0,030	0,18	0,607

THREE DIMENSIONS

Two electron fragments run simultaneously in circular orbits at a radial distance of nucleus. The next step is to know circular orbit radius for each of birth wavelength (λ_{Birth} or simply λ) divisions. Radius orbit is defined as orbital circumference (c_i), where c_A and c_B are the orbital circumference for the electronic extremes A y B respectively. It is preferred to indicate as orbital circumference (c_i) to avoid confusing orbital radius with radial distance nucleus-electron (r_i). Where suffix indicates electronic extreme considered and i suffix is used to both electronic extremes (EE_i). All abbreviations are compiled at article end.

P015 Orbital circumference (c_i) from wavelength fold

Orbital circumference (c_i) of two electronic extremes for any division (d) is proportional to electronic extreme wavelength (λ_i) and inversely proportional to wavelength compaction factor (C_F) (1).

$$(1) c_i = \frac{\lambda_i}{2\pi C_F}$$

By this expression is obtained that orbital circumference is derived from λ_i and, in the concrete case of $C_F=1$, λ_i is equal to circumference perimeter. For that same λ_i , if C_F passes from 1 to 2, then c_i is divided by 2. As a consequence, λ_i is compacted by 2 to fit in new circumference perimeter. Before focusing on C_F value, this article is followed by orbits geometric distribution.

P16 Circular orbit height (H_i) and relationship $r_i \geq c_i$

Circular orbital height (H_i) is obtained by right-angled triangle relation (2):

$$(2) H_i = \sqrt{r_i^2 - c_i^2}$$

In any case, for division to exist and therefore do ES (Equi-energetic state), must be satisfied that r_i is higher to or equal to c_i .

This article aims to be an introduction to geometry and implications of Victoria Equation and ES in the atom. Consequently, some licences are included and will be indicated and justified in later articles. For example, theory is going to work with $C_F=1$,

to later explain C_F value reasons. H_i , c_i and r_i representation for one of two electronic extremes is shown in **Image 1**.

Image 1 - H_i , c_i and r_i in circular orbital representation

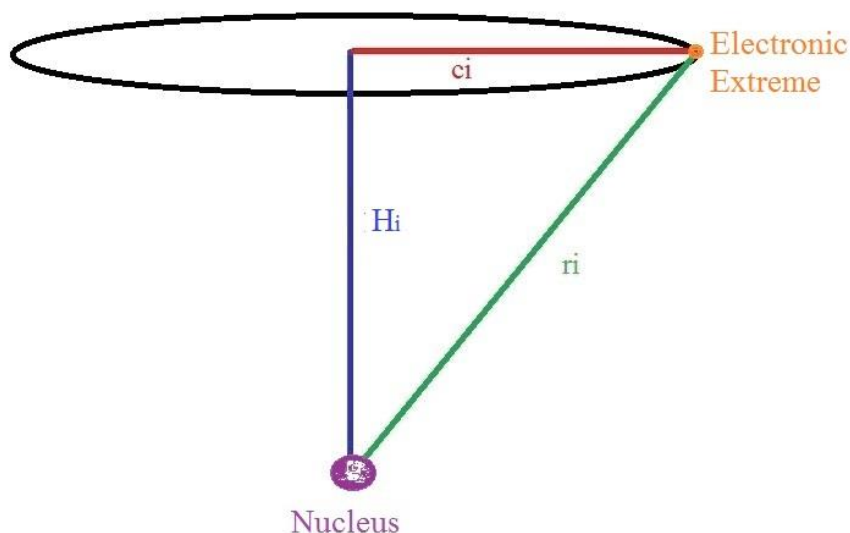


Figure 1 shows electron with E_o corresponding to Lithium most external Ionization Energy (All IE are from [2]) according to the previous scheme of Image 1 (Axis Y is H_i and Axis X is c_i). As in [1] and for the same reasons, divisions that are d range representative and show influence in curves have been selected. One division has been added to division 1 until reaching $d=12$. Subsequently, increase between divisions is greater.

H_i and c_i continuous growth distribution is observed. This occurs whenever $C_F = \text{constant}$. Similar curve is obtained by plotting r_i vs. c_i (**Figure 2**). In the introductory mode of bond radius, an extension of birth zone is made (**Figure 3**) to observe that, in specific Lithium case, bond radius of its diatomic molecule (Li_2) is 1.3365 Å [3] coincides with pivot radius or $(r_i)_{d \rightarrow \infty}$ equals 1.3353 Å.

Figure 1 - H_i vs c_i with $C_F = 1$ for Lithium 2s

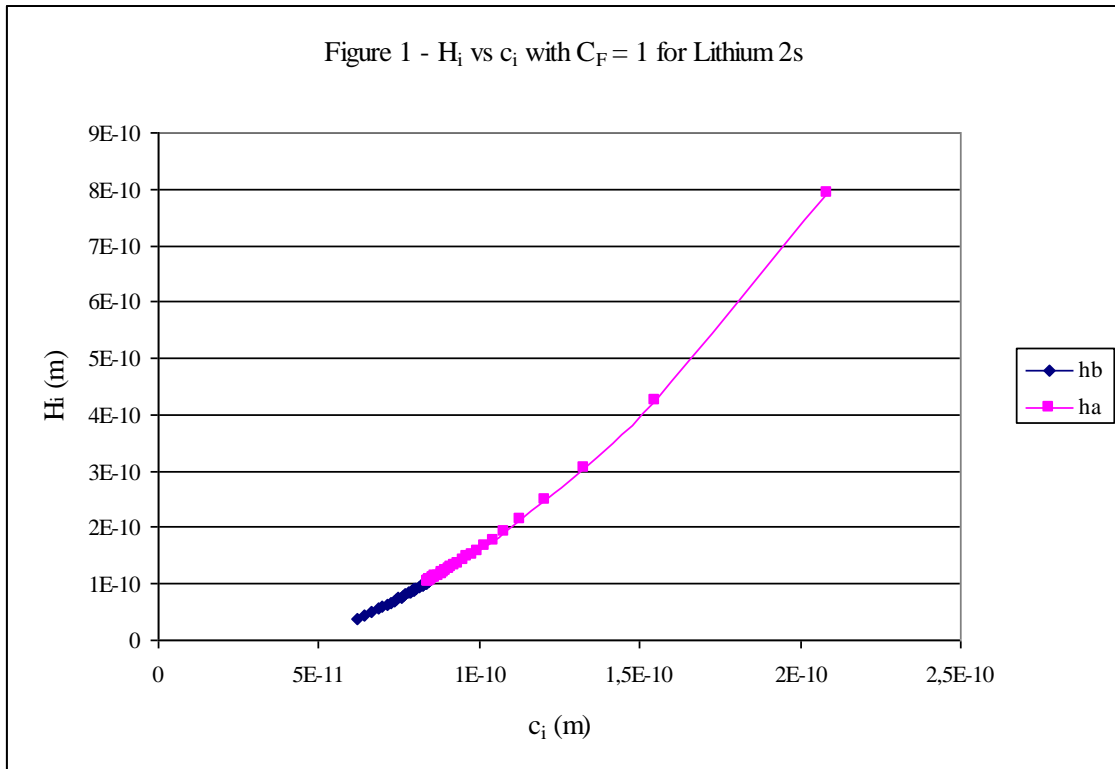
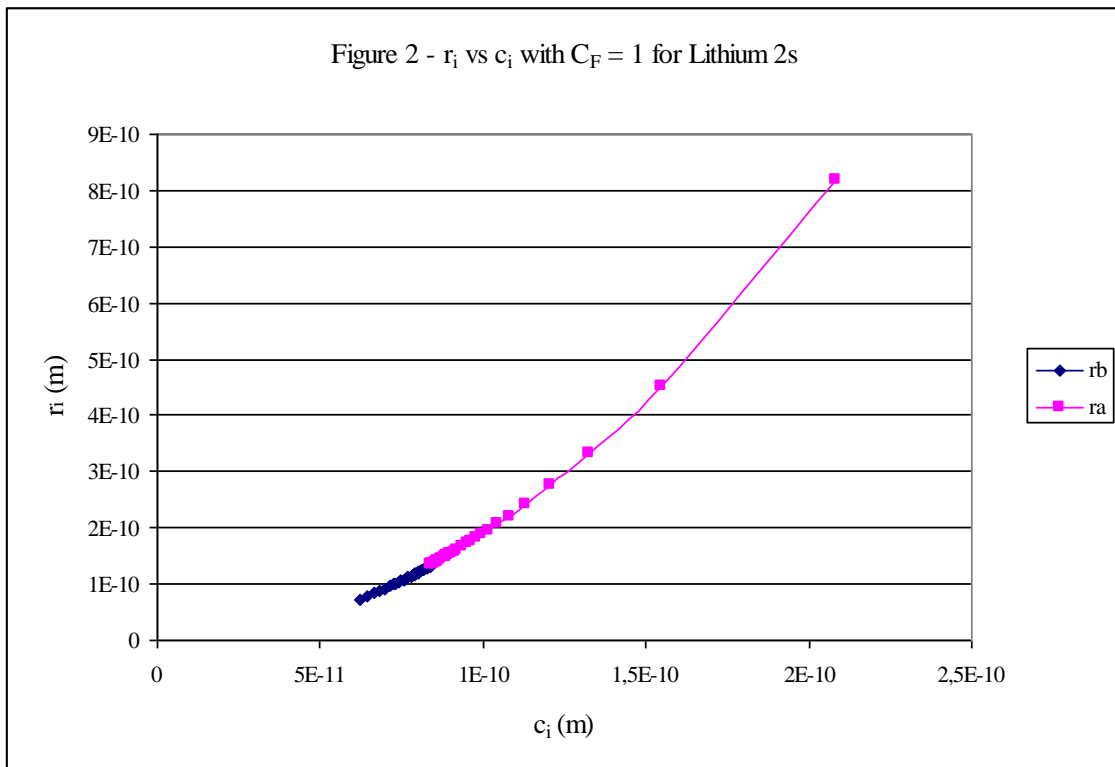


Figure 2 - r_i vs c_i with $C_F = 1$ for Lithium 2s



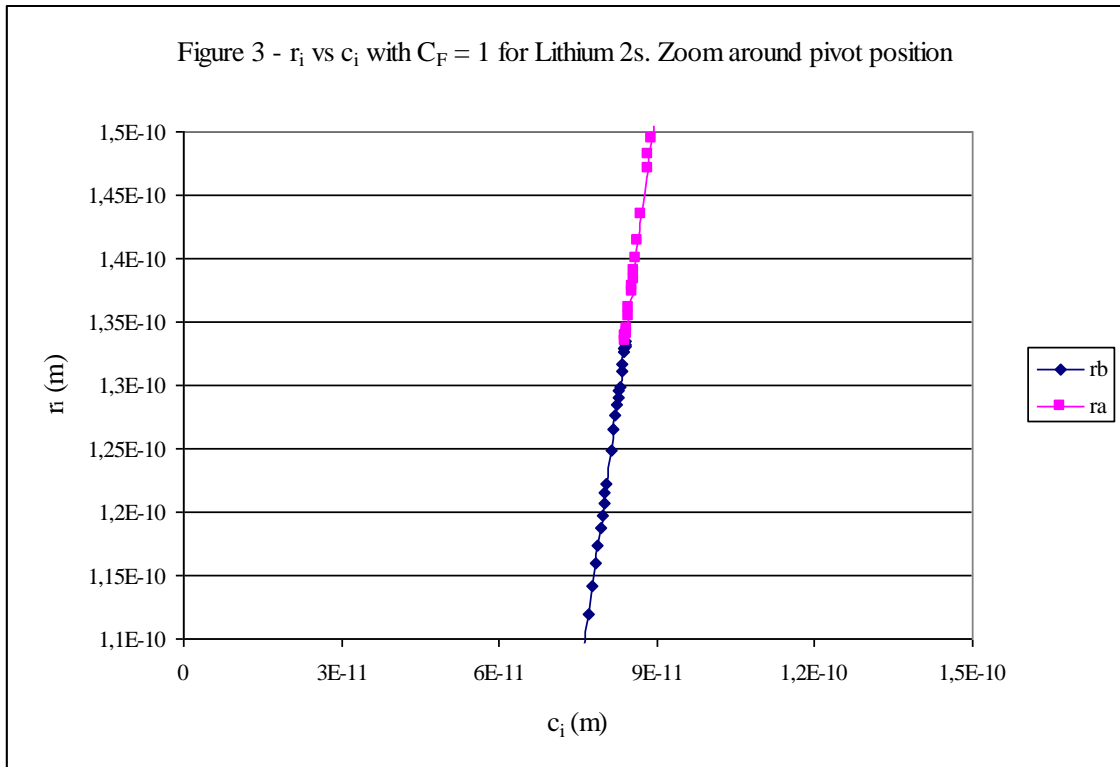


Figure 4 shows Lithium 2s with different Compaction Factors of 1, 2 and 3. C_F increase causes c_i proportional compaction (1). In this way, starting from the same situation, multiplying C_F by a number implies division of c_i by the same factor. C_F affects c_i but no r_i which depends on energy and is obtained by Victoria Equation. Consequently, since C_F affects c_i while r_i remains constant, H_i must vary to balance c_i change and meet (2).

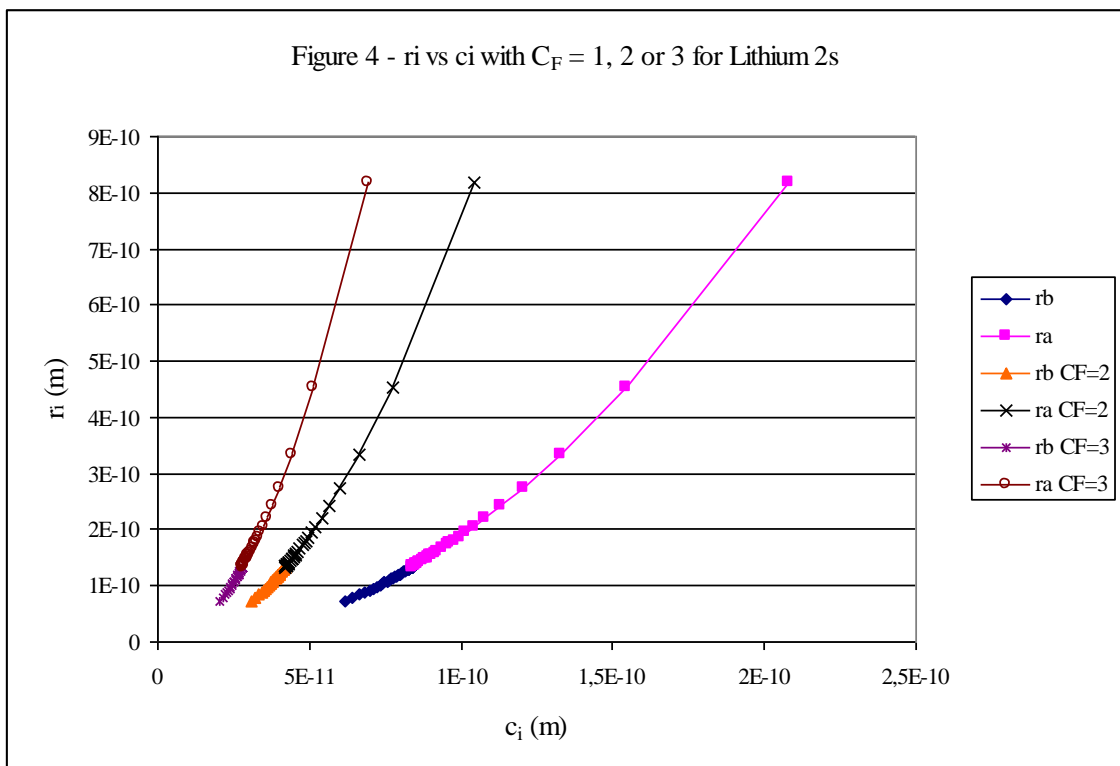
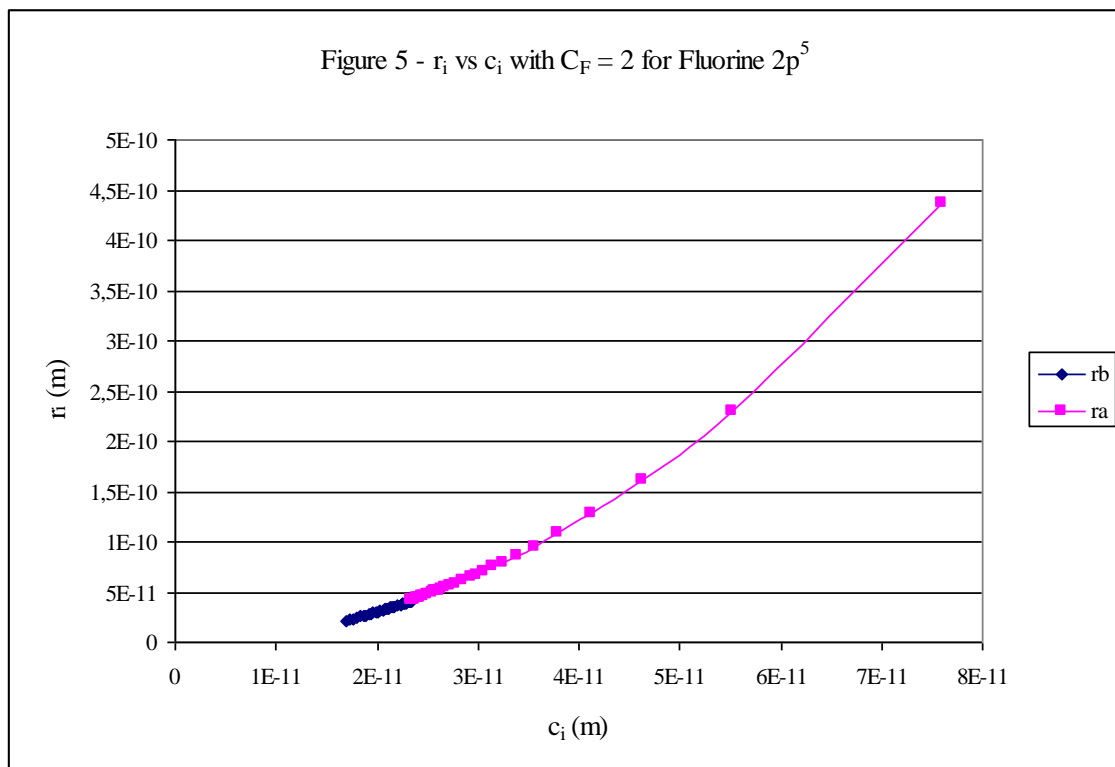


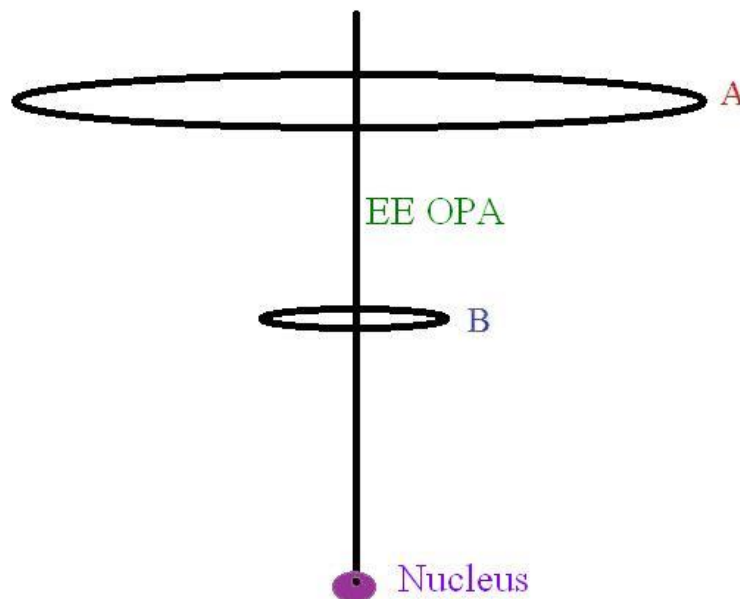
Figure 5 is r_i vs. c_i representation for Fluorine outermost electron with their $E_o=IE$ [2] and $C_F=2$. $C_F=1$ is too low causing $c_i>r_i$ and consequently H_i without real solutions (2). In [1] is used $(r_i)_{d\rightarrow\infty}$ application: Radius approximate for outermost lobe in ns electrons. This application is only valid for outermost lobe in ns electrons because, at this time, z calculation is limited to these lobes as indicated in P14. $z=1$ license for Fluorine outermost electron has been taken and is maintained to compare $(r_i)_{d\rightarrow\infty}$ and theoretical atomic radius as maximum charge density in the outermost electron shell of the atom [1]. This comparison is only a rough approximation as explained in [1] and further considering that $z=1$ for $2p^5$ Fluorine is not its real z. Even being an approximation, comparison is optimal: $(r_i)_{d\rightarrow\infty}$ for $2p^5$ Fluorine is 41.3 pm, 38 pm [5] and 41 pm [4]. Results are not so positive in other atoms and subsequently, Probability concept will be introduced and C_F variable will be detailed.



P17 Orbital planes of two Electronic extremes are parallel.

Orbital planes corresponding to each of two EE are parallel and the same axis passes through them at its orbital centre (Image 2). This axis is called Orbital Planes Axis (OPA). EE are represented by A (EE_A or outermost) and B (EE_B or innermost).

Image 2 - Electronic Extremes Orbital Planes Axis: EE OPA



P018 Rotation movement or fixation of OPA

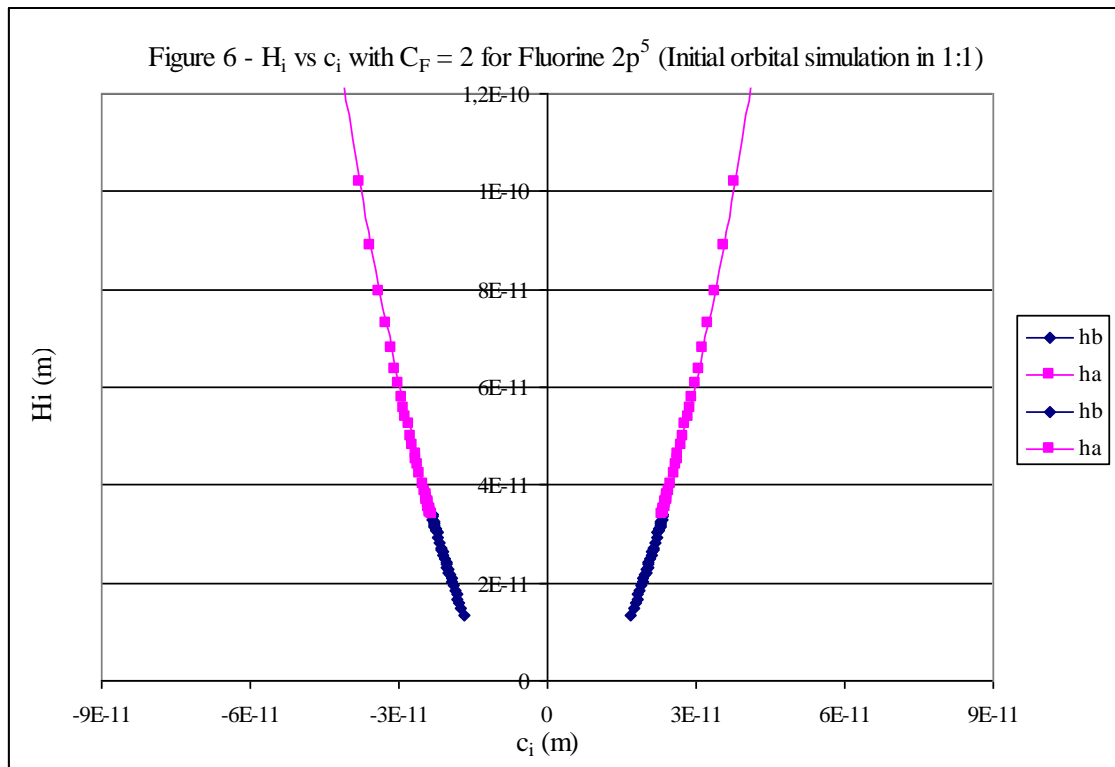
Rotation movement or fixation of OPA depends on the orbital type:

a) s electrons. In the case of spherical symmetry electrons that are first created in each energetic level, OPA does not present movement limitation and therefore can move through of three spatial dimensions. This fact allows it to have spherical symmetry.

b) No s electrons. The rest of orbitals have no OPA rotation possibility. Thus, in the case of electrons called p-type, each of the three p orbitals is oriented to one direction. The geometry must be deepened before studying reasons for these orientations.

Difference between s and non-s electrons is like seeing blades of moving fan (seen as a whole) or stopped (which looks its shape) respectively.

In the previous Figures, two axes do not have the same scale. Objective is to observe, even for lowest divisions of external electronic extreme, highest values of H_i and r_i respect to c_i . **Figure 6** shows two dimensions (c_i and H_i) on the same scale. In addition, with this representation in two dimensions and considering that orbit is plane, for each H_i value can be plotted its corresponding value of $+c_i$ and $-c_i$. Two dimensions can become three considering that in each H_i value there is one orbital plane that passes through the two points ($+c_i$ and $-c_i$) of the orbital circumference. In both two and three dimensions, Figure 7 already remembers orbitals with its dumbbell shape. It is true that there is a long way to go. For example, H_i value has been limited (1.2 A) so that it can not be seen that as c_i always continue to increases with H_i . Constant C_F will be changed by variable C_F to resolve this problem in later article.



P019 Orbital Angular Momentum (OAM)

Orbital angular momentum is defined as the sum of two electronic extremes OAM. As the movement is in orbit, the direction of the speed and the line connecting the centre of the orbit with the electron form an angle of 90 degrees. In consequence, sinus equals 1. Orbit radius considers how many times λ_i has been compacted (C_F).

Orbital Angular Momentum for an electronic extreme (OAM_i) gives (3) that simplifying gives (4):

$$(3) OAM_i = m_i c_i v_i C_F = \frac{m_e}{2} \frac{\frac{h}{2}}{\frac{m_e}{2} v_i 2\pi C_F} v_i C_F$$

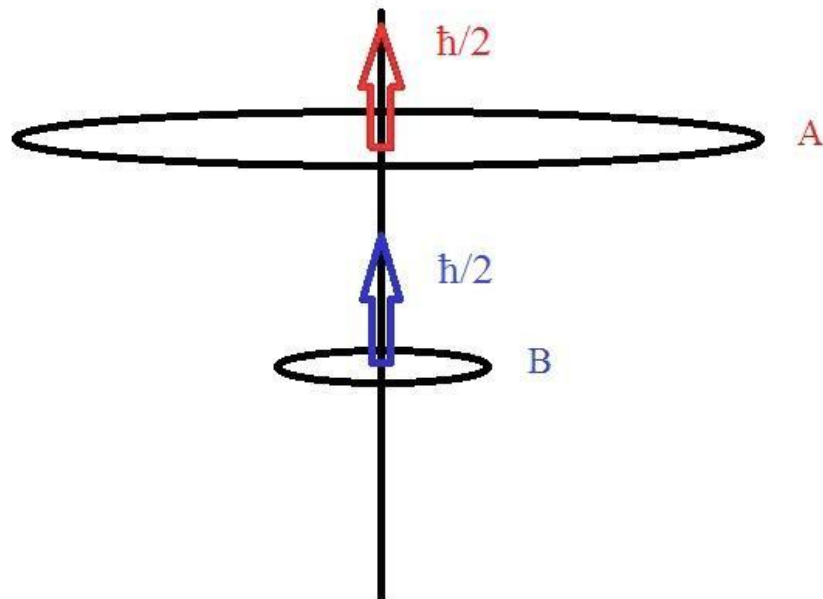
$$(4) OAM_i = \frac{h}{4\pi} = \frac{\hbar}{2}$$

OAM in Orbital Planes Axis or OAM_{OPA} (5) is sum of two identical contributions equals to (4) as consequence of **Image 3**.

- Two vectors are on the same axis.
- Two EE rotation directions are the same.

$$(5) OAM_{OPA} = \frac{\hbar}{2} + \frac{\hbar}{2} = \hbar$$

Image 3 - OAM in OPA: Two identical contributions



(5) result is valid for p-orbitals. The rest of orbitals without free axis movement (d, f, g...) need further studies. When OPA has free movement (s-orbital), OAM_{OPA} (5) cancel out and OAM gives zero.

P20 Movement between orbits or spin movement

Spin movement is defined as electronic extreme rotation on its axis and, behaving like a screw, allows electronic extreme to approach and away from nucleus. This movement is done by raising and lowering orbits and is called: "electronic extremes swinging". Movement generated by screw spin implies that A and B electronic extremes first move away and then approach birth or pivot position.

P21 Hypothesis of alternating spin movement

A and B electronic extremes make spin movement alternately:

- a) t1: First, one electronic extreme loses energy and moves away from nucleus (EE_A or EE_B).
- b) t2: Second, the other electronic extreme wins energy and approach nucleus (EE_B or EE_A).

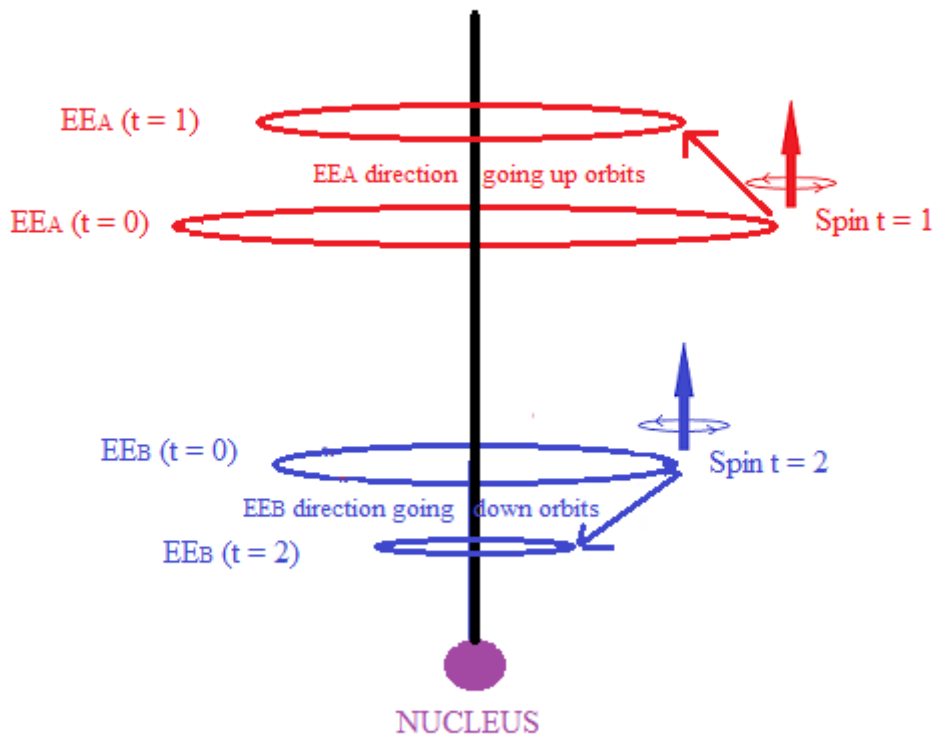
Two electronic extremes do not make spin movement at the same time. This fact implies that electronic extremes do not vary their division in unison: they do it in turn. Thus, contribution to Spin Angular Momentum (SAM) of one electronic extreme corresponds to the global one (6)

$$(6) SAM_{electron} = SAM_{one\ electronic\ extreme} = \frac{\hbar}{2}$$

Rotation occurs on its axis while globally electronic extreme follows the direction defined by the orbit where EE moves and where it goes, that is, uniting both orbits (direction indicated by arrows in **Image 4**). Orbital circumference (c_i) difference between two orbits must be coordinated with rotation on its axis (spin) and for this reason orbits joined in each movement are much closer than in Image 4.

Two movements between orbits marked by arrows are shown in Image 4. A electronic extreme (EE_A) loses energy in first instant (t_1) and after that, EE_B gains that energy and is able to penetrate towards nucleus (t_2). Screw rotation direction must be able to direct both SAM in proper vector sense. Orbital circumference (c_i) decreases when moving away in EE_A case (c_A) and is licence made since has not yet been justified (remember that c_i and H_i always grow at the same time in Figure 6).

Image 4 - Hypothesis of alternating spin movement ($\hbar/2$)



P22 Hypothesis of Spin Magnetic Momentum

In Spin Magnetic Momentum (SMM) only half of electron mass intervenes (P20 and P21). Classical SMM (7) differs from experimental SSM by g factor whose value is almost equal to 2 (2.0023193043622(15)) [6] (8). This difference is mainly due to (7) considering entire electronic mass when only half of electron mass is involved (9):

$$(7) \mu_{\text{CLASSIC}} = -\frac{e\hbar}{2m_e} \frac{s}{\hbar} = -\mu_B \frac{s}{\hbar}$$

$$(8) \mu_{\text{EXPERIMENTAL}} = -\frac{ge\hbar}{2m_e} \frac{s}{\hbar} = -g\mu_B \frac{s}{\hbar} \quad \text{with } g \approx 2$$

$$(9) \mu_{\text{EE}} = -\frac{e\hbar}{2\frac{m_e}{2}} \frac{s}{\hbar} = -2\mu_B \frac{s}{\hbar}$$

Difference between g and 2 is 0.0023193043622 . Two questions can be asked if reason is based on electron and electronic extreme mass:

a) How much mass is not part of alternating spin movement? Said mass is called mass free of spin movement ($m_{\text{free-sm}}$). RC in percentage between $m_{\text{free-sm}}$ and $10\hbar$ is $\approx 0.05\%$

$$(10) m_{\text{free-sm}} = m_e - \frac{2m_e}{g} = 1.05515 \cdot 10^{-33} \approx 10\hbar$$

b) Where is this mass that does not rotation on its axis like a screw? One proposed possibility is must be "external" to two electronic extremes and be part of λ/d (Union nexus between both electronic extremes).

Orbital movement is performed at the same time by both electronic extremes (EE_A and EE_B) fulfilling balance between kinetic and potential force. Consequently, both EE_i have the same mass ($m_e/2$) and charge all the time ($q/2$) [1].

In contrast, spin movement is quasi-instantaneous equilibrium in which one EE loses energy and the other EE wins. Net result is division change of initial wavelength and electron delocalization in space. As result, only one EE acts with its mass ($m_e/2$) and with all electron charge electron (q) in each concrete moment. Therefore, considering (6) development made in (11), (9) deduction is (12):

$$(11) \text{SAM}_{\text{electron}} = \text{SAM}_{\text{oneelectronicextreme}} = \frac{m_e}{2} r_{\text{spin}} v_{\text{spin}} = \frac{\hbar}{2} = S_z$$

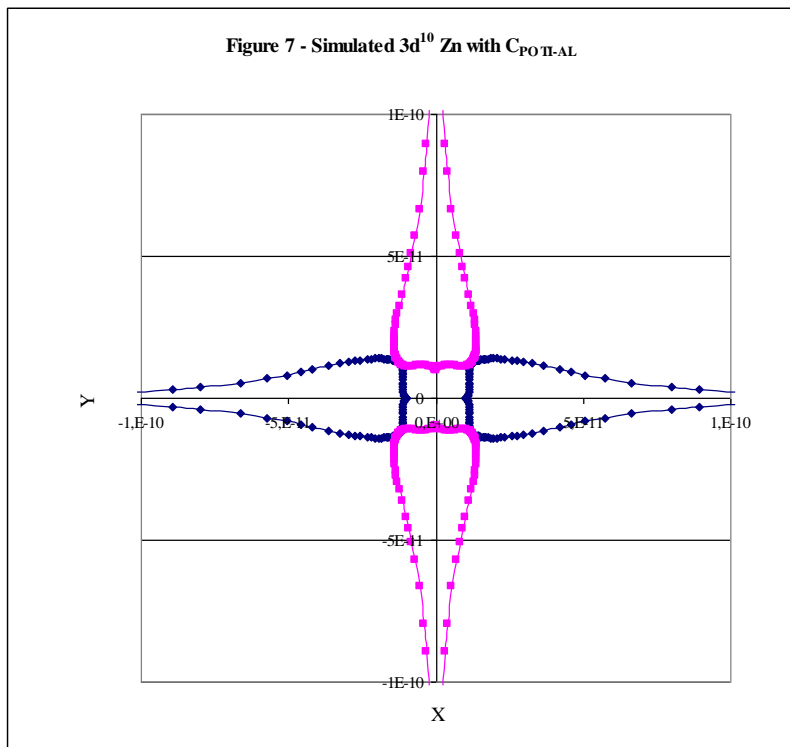
$$(12) \mu_{\text{EE}} = IA = \frac{-e}{T} \pi r^2 = \frac{-erv}{2} = \frac{-e}{m_e} s = -2 \frac{e\hbar}{2m_e} \frac{s}{\hbar} = -2\mu_B \frac{s}{\hbar}$$

3) GEOMETRY AND PROBABILITY [7,9]

Following steps are developed in [7,9]. Electron Probability is introduced based on electron orbital turn time. Variable Compaction Factor (C_F) or First Feliz Solution is included to correct rising probability with the distance [7]. Probability radial closure objective is achieved by using Second Feliz Solution with high order variable C_F (Theoretically to order infinite). Second Feliz Solution factors importance is studied and its relationship with d , division in which electronic extreme is found, is checked [8]. Orbital geometric limit and orbital volume filling are acquired with C_{POTI} coefficient of

Third Feliz Solution. These actions are performed by radial probability distribution curve that is kept constant. [9]

Geometry and probability of the so-called orbitals are obtained in these articles. One orbital type of $3d^{10}$ Zinc is shown in **Figure 7** and **Figure 8** respectively.



BIBLIOGRAPHY

- [1] Javier Silvestre. Victoria Equation - The dark side of the electron. <http://vixra.org/abs/1712.0109>
- [2] Kramida, A., Ralchenko, Yu., Reader, J., and NIST ASD Team (2014). NIST Atomic Spectra Database (ver. 5.2), [Online]. Available: <http://physics.nist.gov/asd> [2017, July 9]. National Institute of Standards and Technology, Gaithersburg, MD.
- [3] Huber, K.P.; Herzberg, G., Molecular Spectra and Molecular Structure. IV. Constants of Diatomic Molecules, Van Nostrand Reinhold Co., 1979
- [4] S. FRAGA, J. KARWOWSKI, K. M. S. SAXENA, Handbook of Atomic Data, Elsevier, Amsterdam, 1979.
- [5] Desclaux JP. Relativistic Dirac-Fock expectation values for atoms with $Z = 1$ to $Z = 120$. Atom Data Nucl Data Tables 1973;12: 311-406.
- [6] David R. Lide, ed., *CRC Handbook of Chemistry and Physics, 89th Edition (Internet Version 2009)*, CRC Press/Taylor and Francis, Boca Raton, FL.
- [7] Javier Silvestre. Relations between electronic extremes: Rotation time as probability and First Feliz Solution. <http://vixra.org/abs/1712.0107>
- [8] Javier Silvestre. Feliz II the prudent: Probability radial closure with high order variable C_F <http://vixra.org/abs/1712.0105>
- [9] Javier Silvestre. Feliz III The King Major: Orbital filled keeping Probability electronic distribution. <http://vixra.org/abs/1712.0104>
- [10] Javier Silvestre. Feliz IV Planet Coupling: Probability curves NIN coupling from origin electron. <http://vixra.org/abs/1712.0103>

- [11] Javier Silvestre. NIN Coupling values in n=2 and Oxygen electronic density. <http://vixra.org/abs/1712.0102>
- [12] Javier Silvestre. Electron Probability with NIN coupling in n=2. <http://vixra.org/abs/1712.0101>
- [13] Electron probability with NIN coupling in n>2 and necessary NIN relationships. <http://vixra.org/abs/1712.0099>
- [14] Kramida, A., Ralchenko, Yu., Reader, J., and NIST ASD Team (2014). NIST Atomic Spectra Database (ver. 5.2), [Online]. Available: <http://physics.nist.gov/asd> [2017, July 9]. National Institute of Standards and Technology, Gaithersburg, MD.
- [15] J.C. Slater in Quantum Theory of Matter, 2nd ed. (1968), pp. 145 and 150, McGraw-Hill.

Abbreviations List

Suffix indicates electronic extreme considered and i suffix is used to both electronic extremes (EE_i). Following Table indicates abbreviations used in this theory and its use in article in question is marked with X. 2 is present article

Abbreviations Table						
Abbreviation	[1]	2	[7]	[8]	[9]	Meaning
α_{NOA}					X	Nucleus-Orbit-Angle
a_0			X			Bohr radius
AL					X	Angular Limit
c_i		X	X	X	X	EE Orbital circumference
C_F		X	X	X	X	Wavelength compaction factor
C_{MON}					X	C_F without C_{POTI}
C_{POTI}					X	Probabilistic Orbital Tide in Third Feliz Solution
$C_{POTI-AL}$					X	C_{POTI} Angular Limit
$C_{POTI-GAL}$					X	C_{POTI} Geometric Angular Limit
$C_{POTI-LAG}$						C_{POTI} Lobe Always growing
d	X	X	X	X	X	Birth wavelength division or simply, division
EE	X	X	X	X	X	Electronic extreme
E_0	X	X	X	X	X	Initial, birth or output energy
E_i	X		X	X		EE energy
E_{k_i}	X		X	X		EE kinetic energy
E_{P_1}	X			X		EE potential energy
ES	X	X				Equi-energetic state
f	X		X	X	X	Constant in Victoria Equation
F	X		X	X	X	Constant f multiplied by z
GAL					X	Geometric Angular Limit
h	X	X	X		X	Planck´s constant
\hbar		X		X	X	Reduced Planck´s constant

Abbreviation	[1]	2	[7]	[8]	[9]	Meaning
h_i	X		X			Planck's constant adapted to EE
H_i		X	X	X	X	EE Circular orbit height
IE	X	X		X	X	Ionization Energy
m_e	X	X	X	X	X	Electron mass
m_i	X		X	X		EE mass
J				X	X	C_F order in Second Feliz Solution (From $x=1$ to J)
K_P			X			Probability constant in Variable C_F
$\lambda_{\text{Birth}} \lambda$	X	X		X	X	Birth wavelength
λ_c	X					Electron classic wavelength
λ_i	X	X	X	X		EE wavelength
$\lambda_{i\text{-Birth}}$	X					EE wavelength when $d \rightarrow \infty$
LAG					X	Lobe always growing
M			X	X	X	MON (Modified Orbital Number)
MON			X	X	X	Modified Orbital Number
NIN	X		X	X		Negative in Negative (Electron in electron concept)
OAM		X				Orbital Angular Momentum
OPA		X				Orbital Planes Axis
P_i			X	X	X	EE Probability
P			X	X	X	PEP (Principal Electronic Part)
PEP			X	X	X	Principal Electronic Part
q_e	X					Electron charge
q_i	X					EE charge
q_{ip}	X					Proton charge
r_{AB}	X					Difference in nucleus distance between EE_A and EE_B
r_O	X					Nucleus distance when EE_i is in pivot or initial position
r_i	X	X	X	X	X	Distance between nucleus and EE
SAM		X				Spin Angular Momentum
SMM		X				Spin Magnetic Momentum
SSM	X		X			Secondary Swinging Movement
v_i	X	X	X	X	X	EE velocity
z	X	X	X	X	X	Effective nuclear charge
Z	X					Atomic number

ARTICLES INDEX

Part	Number	Title	
Part I - Victoria Equation and Feliz Solutions	01	Victoria Equation - The dark side of the electron.	http://vixra.org/abs/1712.0109
	02	Electronic extremes: orbital and spin (introduction)	Modified and expanded. Present article
	03	Relations between electronic extremes: Rotation time as probability and Feliz I.	http://vixra.org/abs/1712.0107
	04	Feliz II the prudent: Probability radial closure with high order variable C_F	http://vixra.org/abs/1712.0105
	05	Feliz III The King Major: Orbital filled keeping Probability electronic distribution.	http://vixra.org/abs/1712.0104
	06	Feliz IV Planet Coupling: Probability curves NIN coupling from origin electron.	http://vixra.org/abs/1712.0103
	07	NIN Coupling values in $n=2$ and Oxygen electronic density.	http://vixra.org/abs/1712.0102
	08	Electron Probability with NIN coupling in $n=2$.	http://vixra.org/abs/1712.0101
	09	Electron probability with NIN coupling in $n>2$ and necessary NIN relationships.	http://vixra.org/abs/1712.0099
Part II – Excited electron: Tete Vic and LAN	10	Excited electrons by Torrebotana Central Line: Tete Vic Equation.	http://vixra.org/abs/1712.0156
	11	Excited electrons: LAN plains for Tete Vic Equation.	http://vixra.org/abs/1712.0155
	12	Relation of Riquelme de Gozy: LAN linearity with energy of excited states.	http://vixra.org/abs/1712.0380
	13	Relation of Fly Piep de Garberí: LAN^{-1} and Ionization Energy.	http://vixra.org/abs/1712.0153
	14	Relation of Silva de Peral & Alameda: LAN interatomicity with energetic relation.	http://vixra.org/abs/1712.0152
	15	Relation of Silva de Peral & Alameda II: jump from n_s to n_s .	http://vixra.org/abs/1712.0151
	16	SPA III: Mc Flui transform for Silpovgar III and Silpovgar IV.	http://vixra.org/abs/1712.0379
	17	SPA IV: Silpovgar IV with Piepflui. Excess Relativistic: influence in LAN and SPA	http://vixra.org/abs/1712.0148
	18	Feliz Theory of Eo vision - Relativistic II: influence in Riquelme de Gozy	http://vixra.org/abs/1712.0147
	19	Pepliz LAN Empire I: $LAN_{n \rightarrow \infty}$ vs. LAN(P50)	http://vixra.org/abs/1712.0146
	20	Pepliz LAN Empire II: $LAN_{n \rightarrow \infty}$ vs. LAN(P50)	http://vixra.org/abs/1712.0145
Part III - NIN: C_{PEP} & C_{POTI}	21	Electron Probability: PUB C_{PEP} I (Probability Union Between C_{PEP}) - Necessary NIN relations.	http://vixra.org/abs/1712.0144
	22	Electron Probability: PUB C_{PEP} II in "Flui BAR" (Flui (BES A (Global Advance) Region)	http://vixra.org/abs/1712.0143
	23	Orbital capacity by advancement of numbers - Electron Probability: PUB C_{PEP} III: "Flui BAR" II and C_{PEP-i}	http://vixra.org/abs/1712.0142
	24	Electron Probability: 1s electron birth: The last diligence to Poti Rock & Snow Hill Victoria	http://vixra.org/abs/1712.0141

Please, write to this email, victoriaequation@hotmail.com , if you want to comment, help divulgation this theory and / or provide modifications or alternatives.

Javier Silvestre