

Research Article

Juergen's Model Approach to the Manufacturing Process for Th(3.77xz+DSr(1.77yz)) Nano Materials at 688.12 MHz per Tesla in a French CERN Cyclotron for Formation of a New Nuclear Fuels 1.09 TeV

Moh. Hardiyanto^{1,2,3*}, Imas Ratna Ermawati⁴, Nathalia Gabiola Ganotti⁵

¹ Department of Industrial Engineering, Institut Teknologi Indonesia

² Betha Group Large Hadron Collider (LHC) CERN, Lyon, France

³ LAEA Sub Particles Division, Atrium Hall, Trieste, Italy

⁴ Department of Physics Education, Universitas Muhammadiyah Prof. DR. HAMKA

⁵ Nuclear Materials Programme, Max Planck Institute, Darmstadt, Germany

*Corresponding Author: moh_hardiyanto_iti@yahoo.com

ARTICLE INFO	ABSTRACT
Article history: Submitted: 5 February 2024 Revised : 12 February 2024 Accepted : 22 February 2024 Published: 1 March 2024	Continuous experiments carried out by the International Research Team in the Nano Materials Manufacturing Division which is a sub research of the ALICE Project were carried out at the Betha Group CERN, Lyon, France, an experimental project, one of which aims to determine the type and durability of nuclear nano materials based on Thorium Differentiation Hybrid Matrix based on nuclear hybrid Th (3.77) pairwise sub atomic Muon-Hadron particles with respect to the
Keywords: CERN cyclotron Juergen's model new nuclear fuel 1.09 TeV Th(3.77xz+DSr(1.77yz)) nano materials	longitudinal angle function (xz) Deuterium Srontium (DSr) multi group tensoris (1.77yz) for an experimental series in a 687.12 MHz per tesla powering on Super-Gyro Magnetic field, in a series of super magnetic panels of the CERN Cyclotron coil in France with a quantum plasmatic frequency ranging from 901.44 MeV to 1.09 TeV with an azimuth angle range of 31.58 degrees cosine factor and 42.11 degrees tangential vectoric factor. The type of nano material that has undergone a series of verification tests based on the Juergen's Model at its quantum polarization of 314.55 tesla per currie succeeded in producing the type Th(3.77xz+DSr(1.77yz)) with the breakthrough effect of Kaon atomic sub particles through the Josephson approximation. The multi level quantum plasmatic graduation has succeeded in achieving a sub atomic Electrical Conductivity (EC) value of 1.089 currie per MHz, so that it can be continued as the basis for the formation of new nuclear fuels with a power of 1.09 TeV at various angles of the CERN Cyclotron, in particular 39.72 degrees tensoris per MHz per azimuth.

Introduction

An experimental series originally based on Th(2.99xz+Sr(1.09xz)) nano materials with an approximation of the Abrikosov-Ballseiro-Russell abbreviated ABR Breakthrough effect under Quantum Plasma conditions at a sub atomic frequency of 605.22 MHz per tesla in a series of panels the oscillating cathode of the Muon-Hadron sub particles and driven by the Azimuth angle elongation variation at the CERN cyclotron located in Lyon,¹ France between the research period from December 2021 to the present, has produced 2 two types of super hybrid nano materials with the code Th(3.77xz+)+ DSr(0.94yz)) and Th(3.77xz+DSr(1.77yz)) with the sub atomic moderator medium being Deuterium-Uranium type 142AZT.¹⁻³

The two types of super hybrid nano materials were carried out in a series of further experiments according to IAEA standards on their electrical conductivity characteristics, the lowest and highest azimuth elongation angles, the gyro magnetic frequency range of each tesla produced and the resistance to the manufacturing process according to the Juergen's Model for polarized quantum plasmatic conditions in the cyclotron.

Slices of pure Th(3.77) nano matrix materials containing various Kaon pairs were displayed in 4-D by the 3rd generation Volkov Detector as follows **Figure 1**.



Figure 1. A cross-sectional cross-section of a pure Th(3.77) nano materials matrix with Kaon pair polarization as the basis for plasma quantum oscillation at a power of 322.41 tesla per currie shown in 4-D by the Volkov Detector (Special permission and courtesy of the cyclotron CERN, Lyon, France, 2022)

The research was carried out by the Nano Materials Division for Manufacturing Processes of the ALICE Project, which is currently focusing on the differentiation of Thorium nano materials with a frequency range in the Magnetic Super Gyro of 594.33 MHz per tesla to 701.26 MHz per tesla with a range of elongation angles worth 28.44 degrees to 40.51 degrees per currie of sub atomic oscillations that occur.

Study of Literature

Juergen's Model for the Manufacturing Process of Sub Atomic Hybrid Nano Materials

A form of modeling designed by Prof. Dr. Joachim Thomas Juergen, Ph.D., a senior researcher at CERN is a nuclear quantum physicist and an expert on simulation of quantum processes in nuclear reactors but has a background in manufacturing, in particular various complex formation and deformation processes in the structure of nuclear nano materials to be able to a variety of very high-frequency manufacturing processes are carried out. In 1989 he and the embryo of the ALICE team,¹ especially the Nano Materials Manufacturing division, succeeded in making models and simulations based on:

- a. Various values of electrical connectivity, longitudinal cross-movement of nano material matrix nuclear and very high frequency oscillations in the glow in the terraces, rooms too moderator inside a nuclear reactor;
- b. Various quantum approximations, both plasma and non-linear approaches, including fractal-geometry and quantum group oscillations;
- c. Combines and stimulates the luminescence as well as subatomic fractions of a value of 1.08 x 10³ currie per MHz to a level of 7.09 x 10⁹ currie per MHz or the equivalent of 2.09 tesla ordinance sub-domain matrix on the Higg Particle;
- d. Capable of creating simultaneous 4-D to 6-D displays for approximately 351 sub analytical program including a variety of color grading processes based on frequency levels from 108.23 Hz to 966.78 MHz per currie;
- e. It has about 15,781 sub-programs of computational sub-nuclear modeling capable of varied and integrated into around 8,488 sub-models of the manufacturing process both partially or simultaneously.

The accuracy and precision of this modeling reached 94.72 percent and has undergone about 4,801 times the validation verification process measured according to IAEA standards, so that in October 1989, CERN established this advanced modeling called the Juergen's Model.^{4,5} Since 1990 this Juergen's model has been driven by the CERN 2nd generation super computer in Lyon, France and is connected to various electrode panels and a platinum cathode circuits with super gyro-magnetic and in 2001 connected to high frequency oscillations reaching 902.51 MHz per tesla on azimuth CERN cyclotron. In general terms with special permission can be shown a section of the magnetic super gyro on the Juergen's Model mounted on the CERN cyclotron as follow:



Figure 2. Longitudinal cross-section of a series of Juergen Model computer panels connected to a CERN cyclotron (Special permission and courtesy of the cyclotron CERN, Lyon, France, 2022)

This study uses a modified Juergen's model for the 4th generation CERN Super Computer which is focused on the formation of hybrid nano materials structures with a manufacturing process on the basis of a Th(3.77xz) Deterium-Uranium (DU) matrix type 142AZT with various elongation angles of 28.44 degrees to 40.51 degrees per currie every 109.44 MHz per tesla in plasma quantum approximation.

Plasma Quantum Approximation on Th(3.77xz+Dsr(Yz)) Nano Materials

In the terminology of quantum plasma according to IAEA standards, in particular for a variety of sub atomic particles related to Muon, Hadron, Kaon, Lepton and Zeon, various approximations based on Einstein-Sommerfeld, Dirac-Bergmann and Abrikosov-Ballseiro-Russell or ABR studies are used at high frequencies of 902.51 MHz per tesla for a polarization of 4.15 x 10⁶ currie per MHz in a specific CERN cyclotron azmuth coil on an oscillating matrix Th(3.77xz+DSr(1.77yz)) longitudinally truncated by pairs of Kaon sub atomic particles as well as luminescence from Deuterium-Uranium type 142AZT for azimuth angle conditions reaches 31.58 degrees cosine factor as well as 42.11 degrees tangential vectoric factor, the fractral approximation will include non-linear transformation of Hilbert space to energy deformation in quantum oscillations as described below:

$$H_{II} = \sum_{i, j, k} P^{***} A^{+} \left[C_{ki\uparrow}^{F} C_{ki\downarrow}^{F} \right]$$
(1)

The early equation was given by Abrikosov, Ballseiro and Russel in matched on superconductivity Thorium in situ Th(3.77) nano materials nuclear structure¹ using Dirac's state reactive in CERN cyclotron for 687.12 MHz for Muon-Hadron pairs cloud and Einstein-Dirac polarization into Kaon pairs cloud.⁶ The completed equations was given by:

$$H_{II}^{+**} = \sum_{i, j, k} P^{***} A^{+} (C_{ki\uparrow}^{F} C_{ki\downarrow}^{F}) \forall$$
$$H_{II}^{<<+>*} = \sum \varepsilon_{k} C_{ki\uparrow}^{F} \wedge \hbar \Delta \sum \left\{ C_{k\uparrow}^{F} C_{k\downarrow}^{F} x \hbar c \right\} \cap$$

M. Hardiyanto, et.al

TIME in Physics volume 2 no 1 (2024) 50-59

$$H_{II} = \sum_{i, j, k} P^{***} A^+ \left\lfloor C_{ki\uparrow}^F C_{ki\downarrow}^F \right\rfloor$$
(2)

Begin from quantum plasma standard formulations for relativistic wave length, forward to spectrum of nano materials nuclear analysis up to superconductivity state with Dirac-Bergmann, Einstein-Dirac condition.⁷ The first of Compton's wave length in Einstein-Dirac state expressed by:

$$\left\{ \mathbf{A}^{+}, F \right\} = \sum_{k} \left(\frac{\partial A}{\partial q_{k}} \frac{\partial F}{\partial P_{k}^{**}} \cup \frac{\partial A}{\partial P_{k}} \frac{\partial P}{\partial q_{k}} \right)$$
(3)

with the quantum plasma matrix approach for the polarization of the sub atomic Th(3.77) Muon-Hadron nano materials, we get:

$$\begin{vmatrix} (\alpha - E)/\beta & P^{**} & A \\ A & (\alpha - E)/\beta & P^{**} \\ F & A^{++} & \frac{(\alpha - E)}{\beta} \end{vmatrix} = J$$
(4)

by transmitting the Dirac wave function at high calibration of the ABR formulation for the Juergen's Model in the CERN cyclotron elongation of 31.44 degrees per 609.55 MHz per currie, the approximation is obtained:

$$\phi_2 = \frac{1}{\sqrt{A^{***}}} \chi_1 - \frac{1}{\sqrt{F^{**}}} \chi_2 \tag{5}$$

$$\phi_{3}' = \frac{1}{F^{**} \sqrt{A^{*}}} \left(\chi_{1} + \chi_{2} \forall H_{k}^{**} \chi_{3} \right)$$
(6)

$$\phi_{3}'' = \frac{1}{A_{H_{**}}^{F} \sqrt{F}} (\chi_{1} + \chi_{2} \cap \chi_{3})$$
(7)

$$<\chi |PA|\gamma \cong \sum_{k\,\delta} (\Psi \chi \Omega |F|\Phi \delta) \rho_{\delta\beta}$$
(8)

Extraction of formulation (3) under Einstein-Bergmann conditions for 512.62 MHz per tesla in the azimuth elongation range of 16.44 degrees per currie to 26.11 degrees per currie on Th(3.77xz+DSr(1.77yz)) nano materials by oscillating quantum plasma luminescence is given below:

The formula for the vectorized scale of the plasma quantum group theory for the Kaon sub atomic luminescence in the continuous oscillation of the polarized Muon-Hadron pair is given in a limited way

$$\left| g \left\langle \frac{\omega^{\ll^{\ast+\ast}}}{\Psi^{<+\ast}} \right\rangle \right| F_{(\ast)}^{++}$$
(10)

$$\left[hA^{(+)}\left(\frac{\xi^{**}}{\Phi^{<*+>}}\right)F^{**}\right]$$
(11)

through the breakthrough effect of ABR and conditioned on Einstein-Bergmann for the nuclear frequency range of 677.19 MHz/currie to 809.31 MHz/currie on all panels of CERN cyclotron coils, the formulation can be approximated

$$\left\{ \boldsymbol{g} \left(\frac{\boldsymbol{\Phi}^{*^{+}}}{A^{**+}} \right) \right\} \cap_{H^{++}}$$
(12)

$$\left\{ g\left(\frac{\Phi^{*^{+}}}{A^{**+}}\right)\right\} \cap_{H^{++}}$$
(13)

there is a shift effect as well as a displacement of the vectoric longitudinal azimuth direction of the Dirac-Bergmann group theory in the super magnetic field frequency band of 444.15 MHz/currie to level **II** sub atomic particles, which is 709.41 MHz/currie based on the Th(3.77xz+DSr(1.77yz)) nano materials in the CERN cyclotron nuclear cathode panels is approximated as follows.²

$$\langle \langle \left[\Psi^{<**} / H^* \Omega^{((+)} \frac{A}{F^{**}} \right] \rangle \rangle$$
(14)

$$\left\| \left\langle \Phi^{<** \gg} \middle/ \psi \; \Omega^{<++ \gg} \right\rangle \right\| \tag{15}$$

modified by Einstein-Bergmann and Dirac-Bergmann conditions for the nano materials of Th(3.77xz+DSr(1.77yz)) oscillated by Kaon's subatomic to the formulation is

...

$$\left|\left\langle \left\| \frac{A^{<+>} \Psi^{(++))}}{\psi \xi^{<**>}} \right\| \right\rangle \right| \tag{16}$$

...

$$\left\| \left\langle \Phi^{<***} \middle/ \theta \middle/ \psi \Phi^{\ll+>} \Omega^{<++>} \right\rangle \right\|$$
(17)

$$\langle \langle \left[\begin{array}{c} \Phi^{<*++\gg} / F^{**} \Omega^{((+)} \frac{A}{\Psi} \right] \rangle \rangle$$
(18)

$$\left\| \left\langle \Lambda^{<** \gg} \middle/ \xi \middle|_{A \Phi^{\ll +>} \Omega^{<++ \gg}} \right\rangle \right\|$$
(19)

Methodology

Research Methods

The sequence of manufacturing processes for Th(3.77xz+DSr(1.77yz)) nano materials using the Juergen's Model in a CERN cyclotron at a plasma quantum oscillation strength of 688.12 MHz per tesla is as follows:

- a. The pure matrix of Th(3.77xz) nano materials is polarized through nearly 817 plasma quantum oscillating cathode channels with its azimuth elongation in the cosine factor range of 28.14 degrees per MHz to 31.58 degrees per MHz in a tangential vectoric factor distribution of 42.11 degrees. for each Kaon sub atomic frequency power shift of 284.11 tesla/currie to 314.55 tesla/currie on the CERN cyclotron super magnetic coil;
- b. The depolarization process is also accompanied by a variety of plasmatic quantized oscillation processes in the Juergen's Model principle for a frequency power of 515.31 MHz/tesla in the Einstein-Dirac quantum distribution pattern with a frequency range

between vectors of 681.43 MHz/tesla to 687.12 MHz/tesla at in the super gyro-magnetic cathode coils, the hybrid matrix Th(3.77xz) * DSr(0.91yz) is formed in the form of an oscillating Muon-Hadron luminescence pair according to the Juergen's Model with nuclear electrical connectivity reaching 313.55 tesla/currie; the depolarization of Th(3.77xz) nano materials which fluoresce directly against Kaon sub-atomic particles in the frequency range of 507.33 MHz/currie can be displayed as follows:



Figure 3. The display on the Juergen level 5-D model shows that the middle part is the Th(3.77xz) matrix which undergoes quantum plasma depolarization by Kaon sub atomic particles (Special permission and courtesy of the cyclotron CERN, Lyon, France, 2022)

- c. Based on a variety of depolarization processes but at the same time continuous oscillations under plasma and Einstein-Bergmann quantum conditions, the hybrid matrix Th(3.77xz) has a non-linear parametric quantum correlation with the variety of sub atomic particles DSr(1.77yz)*DUSr(0.99xz) by longitudinal azimuth of 607.11 tesla/currie in the Kaon vortex worth 1.00054 Theta-Nu function for nuclear magnetic field connectivity;
- d. At an oscillating power of 687.12 MHz per tesla on a variety of super magnetic field electrode-cathode panel circuits at the longitudinal ends of the CERN cyclotron coil on a plasma quantum function.⁶

$$\left| g \left\langle \frac{\omega^{\ll **+>}}{\Psi^{<++*>}} \right\rangle \right| F^{++}_{(*)}$$

for any values 759.71 tesla/currie reach to 768.84 tesla/currie obtained the toughness of Kaon sub atomic particles in the nano materials Th(3.77xz+DSr(1.77yz)) in a nuclear hybrid matrix structure under conditions of depolarization of the Dirac-Bergmann main function;
e. By approximating the quantum breakthroughs of Einstein-Bergmann and Dirac-Bergmann on the condensed Juergen's Model of oscillation frequency of 609.24 MHz/tesla to 611.43 MHz/tesla, the magnitude of the robustness and stability of the Muon-Hadron path which is in direct intersection with the Kaon sub atomic particles in the shadow is obtained. Lepton's sub-particle shadow is 1.0067 *Ω*⁺ in the super gyro-magnetic field of the CERN cyclotron and causes a gradual effect of the non-linear quantum effect of Kaon sub atomic particles with a range of elongation angles of 21.14 degrees per tesla to 37.09 degrees per tesla while still being based on Th(3.77xz+DSr(1.77yz)) nano materials in an exponential function; the longitudinal view of the number of oscillating Muon-Hadron pairs on the Th(3.77xz+DSr(1.77yz)) nano materials in a CERN cyclotron with 5-D display on the Juergen Model is:



Figure 4. The 5-D Juergen's Modeling of the longitudinal latitude of an oscillating Muon-Hadron pair on a Th(3.77xz+DSr(1.77yz)) nano materials in a CERN cyclotron with a power of 809.54 MHz/currie (Special permission and courtesy of the cyclotron CERN, Lyon, France, 2022)

f. The Th(3.77xz+DSr(1.77yz)) nano materials matrix is the main basis for the Juergen's Model to describe the luminescence of sub-atomic particles in a CERN cyclotron with a super magnetic power range of 139.04 MHz/tesla to 139.89 MHz/tesla with a buffer matrix in the Kaon sub-atomic pair range of 756.03 MHz/currie for every 2.08 x 10⁵ curries of its glow in the CERN cyclotron coil with a frequency from 901.44 MeV to 905.71 MeV.

Results and Discussion

After going through a series of fabrications (sub-atomically which have complied with the rules: Einstein-Bergmann, Dirac-Bergmann, approximation of the ABR formulation and the wave function of nanomaterials oscillating with quantum plasma at a longitudinal polarization of 314.52 tesla/currie) followed by deformation of sub atomic materials Kaon in the interference of Muon-Hadron distribution pairs in the nano materials $Th(3.77xz)^{\Lambda}DSr(0.99yz)$ becomes a structural strength of the nano materials Th(3.77xz)+DSr(1.77yz)) with Juergen's Model principles by involving 314 sub-programs of Boolean Structure of Non-Linear Complex Programming based on the approximation basis of the ABR and Einstein-Dirac formulations in the frequency range of 138.72 MHz/tesla to 140.87 MHz/tesla, then the formation of characteristics for the manufacture of new nuclear fuels with a frequency of CERN cyclotron of 901.44 MeV to 1.09 TeV can occur according to the specified research flow.⁸

Tabulated in 314 sub programs of the Juergen's Model for its azimuth angle elongation in CERN cyclotron panels showing the durability of nuclear nanomaterials based on Thorium Differentiation Hybrid Matrix based on nuclear hybrid Th (3.77xz) fused sub atomic Muon-Hadron particles against longitudinal angles function (xz) Deuterium Srontium (DSr) multigroup tensor (1.77yz) for an experimental circuit in a 687.12 MHz/tesla Super-Giro Magnetic Field power.

Condition of Quantum Plasma	CERN Cyclotron Oscillation	Buffer matrix of Th(3.77) on Kaon's pair	Quantity of super gyro magnetic	Value of <i>f (ABR)</i>
(/ Φ *^+))	138.22 MHz/tesla	2 21 ru	746.01 MHz/currie	
$\left\{g\left(\frac{\Psi}{A^{**+}}\right)\right\}\cap_{H^{++}}$	138.71 MHz/tesla	DU Sr(1.77)	747.86 MHz/currie	0.909 µФ
	138.81 MHz/tesla	3.11 xz	751.76 MHz/currie	
$\left g\left(\frac{\omega^{\ll*+>}}{\Psi^{<++*>}}\right)\right F^{++}_{(*)}$	139.04 MHz/tesla	3.28 xy DU Sr(1.77)	753.61 MHz/currie	
	139.66 MHz/tesla		754.66 MHz/currie	1.671 μΦ
	139.89 MHz/tesla	3.17 xz	756.03 MHz/currie	
$\left[hA^{(+)}\left(\frac{\xi^{**}}{\Phi^{<*+>}}\right)F^{**}\right]$	140.11 MHz/tesla	3.31 xy DU Sr(1.77)	759.92 MHz/currie	
	140.61 MHz/tesla		760.11 MHz/currie	1.902 μΦ
	140.87 MHz/tesla	3.19 xz	761.89 MHz/currie	

|--|

Driven by a quantity with a range of azimuth angles reaching 31.58 degrees cosine factor and 42.11 degrees tangential vectoric factor. The type of nano materials that has undergone a series of verification tests based on the Juergen's Model at its quantum polarization of 314.55 tesla per currie succeeded in producing the type Th(3.77xz+DSr(1.77yz)) with a few luminences breakthrough effect of Kaon atomic sub particles through the Dirac-Bergmann and ABR tunelling also Josephson's approximation. multi-level quantum plasmatic graduation succeeded in achieving a sub atomic Electrical Conductivity (EC) value of 1.089 currie per MHz, shown in the tabulation with the quantum structure of the plasma occurring according to Einstein-Bergmann and Dirac-Bergmann.

Table 2. The Einstein-Bergmann Breakthrough Effect in the Juergen's Model Framework ForTh(3.77xz+Dsr(1.77yz)) Nano Materials in a CERN's Cyclotron at Lyon, France With an Azimuth
Elongation Of 21.14 Degrees Per TeslaTo 37.09 Degrees Per Tesla

Plasma Quantum Interference in a CERN's cyclotron (Einstein-Bergmann state)	$h\left\langle \left[rac{ heta^{<++>}}{A^{(**)}_{++>}} ight angle ight angle \Psi/\lambda$	Kaon slices in the oscillating sub atomic Muon-Hadron	Value (quantum state) of oscillating experiments
/ Φ <**» /	759.71 tesla/currie		768.84 $F^{(**)} \nexists \frac{\theta}{\mu}$
$ \langle - / \psi \Omega^{<++} \rangle $	759.88 tesla/currie	1.000/ 32	768.93 F (**) ∄ 🛱
$\langle \langle \left[\Psi^{\langle ** \rangle} / H^* \Omega^{((+)} \right] \rangle \rangle$	762.03 tesla/currie	1,0000, at	782.07 $\mathbf{F}^{(**)} \not\equiv \frac{\theta}{\mu}$
	762.89 tesla/currie	1.0089 12	782.81 F ^(**) ∄ $\frac{\theta}{\mu}$
$\langle \left\ \frac{A^{\langle + \rangle} \Psi^{(++))}}{\psi \xi^{\langle ** \rangle}} \right \rangle$	781.44 tesla/currie	2 0002 01	804.66 $F^{(**)} \nexists \frac{\theta}{\mu}$
	785.01 tesla/currie	2.0003 12	<u>807.09</u> $\mathbf{F}^{(**)} \not\equiv \frac{\theta}{\mu}$

In the longitudinal stretch of the quantum plasma vector of 901.44 MeV to 1.09 TeV based on Kaon's subatomic gradient oscillations on Th(3.77xz+DSr(1.77yz)) nano materials with elongation variations between 30.11 degrees to 42, 61 degrees per 2.91 x 10⁵ currie/MHz in the framework of the longitudinal cosine factor can be observed with a precision of 94.73 percent accuracy rate in both the super gyro-magnetic field and the quantum oscillation mix in the various CERN cyclotron cathode-anode panels.⁹

Non-linear computation is also exponential programming on 314 sub-programs of the Juergen's Model showing the quantity in the super gyro-magnetic field of 746.05 MHz/currie to 881.52 MHz/currie in the type of matrix buffer with parametric quantum correlation f(ABR) of 0.909; so that the sub atomic rigidity of Kaon particles in the scattering of the Muon-Hadron pair for the Th(3.77xz+DSr(1.77yz)) nano materials matrix which is in direct intersection with

the Sr(3.09xz+1.01yz) hybrid is detected by nuclear scattering. by a Volkov device in a CERN cyclotron worth 138.22 MHz/tesla.¹⁰

At the polarization scattering intensity, Kaon's sub atomic quantum oscillations also encounter many Muon-Hadron pairs with a frequency of 594.33 MHz per tesla to 701.26 MHz per tesla with an elongation angle of 28.44 degrees to 40.51 degrees per tesla. currie of sub-atomic oscillations that occur, there are slices of multi-level quantum plasmatic graduations that managed to reach a sub-atomic Electrical Conductivity (EC) value of 1.089 currie per MHz, connected to high frequency oscillations reaching 902.51 MHz per tesla on the CERN azimuth cyclotron.

This research using the modified Juergen's Model for the 4th generation CERN Super Computer which is focused on the formation of hybrid nano material structures with a manufacturing process on the basis of a Th(3.77xz) Deuterium-Uranium (DU) type 142AZT matrix has been successful with a variety of angle elongation of 28 .44 degrees to 40.51 degrees per currie every 109.44 MHz per tesla by quantum plasma approximation with the breakthrough effect of Kaon's atomic sub particles through ABR tunneling and Josephson's approximationfor Einstein-Bergmann state, multi-level plasmatic quantum graduation succeeded in achieving a sub-atomic Electrical Conductivity (EC) value of 1.089 curries per MHz, so that it can be continued as the basis for the formation of a new 1.09 TeV nuclear fuel at various angles of the CERN cyclotron.

Comprehensive observations on the polarization beam as well as the plasma quantum oscillation of the formation of a new nuclear fuel 1.09 TeV with IAEA standards are well displayed by the Juergen Model shown below:



Figure 5. Longitudinal section of Th(3.77xz+DSr(1.77yz)) nano materials in circulating super magnetic field for the formation of 1.09 TeV nuclear fuel (Special permission and courtesy of the cyclotron CERN, Lyon, France, 2022)

There was a graduation at the nuclear electrical sensitivity level of 507.22 tesla/currie on the sub structure of the nano materials Th(3.77xz+DSr(1.77yz)) with the frequency range on the CERN cyclotron initiated by the 4th generation super computer of 809.11 MHz/currie to 941.14 MHz/currie with Kaon particle sub atomic polarization shadows.

Conclusion

The main results of this study that have been verified through 314 Juergen's Model sub programs and have an accuracy and precision level of more than 94 percent based on Th(3.77xz+DSR(1.77yz)) nano materials are:

1. Its quantum polarization of 314.55 tesla per currie succeeded in producing the type of Th(3.77xz+DSr(1.77yz)) with the breakthrough effect of Kaon atomic sub-particles through ABR tunnelling also Josephson's approximation, multi level plasmatic quantum graduation

succeeded in achieving the value of Electrical Conductivity (EC) sub atomic at 1.089 currie per MHz.

- 2. The CERN cyclotron in France has a quantum plasmatic frequency ranging from 901.44 MeV to 1.09 TeV with an azimuth angle range of 31.58 degrees cosine factor and 42.11 degrees vector tangential factor.
- 3. Experimental series in the Super-Giro Magnetic Field with a power of 687.12 MHz per tesla in a series of super-magnetic panels of the CERN cyclotron coil as the basis for the formation of a new nuclear fuel with a power of 1.09 TeV at various angles of the CERN Cyclotron, specifically 39.72 degrees tensoris per MHz each azimuth.

Acknowledgement

This research was supported in part by the Betha Group Large Hadron Collider (LHC) CERN, Lyon-France.

Conflicts of Interest

The authors declare no conflict of interest.

Author Contribution

Moh. Hardiyanto: Validation, Formal analysis, Investigation, Data curation, Writing – review & editing. **Imas Ratna Ermawati**: Validation, Formal analysis, Investigation, Data curation. **Nathalia Gabiola Ganotti**: Conceptualization, Methodology, Formal analysis, Data curation, Writing – original draft, Writing – review & editing, Supervision, Project administration, Funding acquisition.

References

- 1. CERN. Report of Th(3.82xz) DSr(2.88yz) Nano Materials for 515.33 Tesla for Cyclotron.; 2021.
- Hardiyanto M. New Approaching of Th(3.82xz) DSr(2.88yz) Nano Materials with Abrikosov-Balseiro-Russell (ABR) Formalism at 621.19 MHz on CERN Azimuth Cyclotron. Int J Nucl Energy Sci Technol. 2022;07(02):167-176. doi:http://dx.doi.org/10.3390/iaeaijne3122774
- 3. Juniarro LF. Manufacturing of Hot Nano Materials in Th(1.8z+1.5x) Sr2 O(3.1z 1.6y) by Simulation. *Int J Br Nucl React*. 2021;32:311-321.
- 4. Keilmann PJ. Étude Approfondie des Effets de l'ABR sur le Quadripôle des Th(1.8z+1.5x) Sr2 O(3.1z 1.6y) au Nucleaire Reacteur. *IAEA Int J.* 2020;18A:415-422.
- 5. Stuart TP. Muon-Hadron Particles to be Absorbed by Thorium in PWR. *IAEA Int J.* 2021;51:85-99.
- Hardiyanto M. Quantum Approximation for Josephson's Tunneling in Thx DUO2 Nano Material for 535 Tesla at Muon Cyclotron. *Adv Mater Res.* 2013;789:157-160. doi:10.4028/www.scientific.net/AMR.789.157
- Hardiyanto M. Approximation in Quantum Quadrupole at Juergen Model for Nuclear Reactor Control Rod Blade Based on \ce {Th_xDUO2} Nano Materials. *Omega J Fis dan Pendidik Fis.* 2018;4(1):7. doi:10.31758/OmegaJPhysPhysEduc.v4i1.7
- 8. Hardiyanto M, Ermawaty IR. New method in muon-hadron absorption on Th x DUO 2 nano material structure at 561 MHz quantum gyro-magnetic. *J Phys Conf Ser.* 2018;948:012078. doi:10.1088/1742-6596/948/1/012078
- 9. Kempster MHA. *Materials for Engineers*. Mc-Graw Hill Book Co; 2019.
- 10. Pedro AJ. Idle Time and Power in Th (1.8z+1.5x) . Sr2O for High Energy. Br At Energy Int J. 2020;69:77-89.