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Fermat's Last Theorem Accurate Method

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this material was Edited via a FREE L<sup>A</sup>T<sub>E</sub>X version

OBSERVATION:

As you will see in further material I Had The Dare to  
name it so because in relative mode SOLVED instantly  
Fermat's Last Theorem

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## 1 Introduction

To understand **Euler - Murgu Equation 1=1.** , maybe is needed a short recapitulation for **Ion Murgu Integers Powers Fundamental Equations**

and then for **Fermat-Murgu Impossible Equations.**

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (T + I)^n = n!$$

**Ion Murgu Integers Powers Fundamental Equations** are IDENTITIES which for every Integers T at power n with  $T, n \in \mathbb{Z}$  reveal an absolute truth connection between  $(n + 1)$  consecutive Powers for every T- Integer .

This also, define a primary form for **Fermat-Murgu n Media** which because of additive property for, can connect also k-th Integers at power n.

Ion Murgu Integers Powers Fundamental Equations are IDENTITIES WITH value ABSOLUTE TRUTH, THEN THE ANSWER in any applications where can be used , also, will be an absolute truth answer.

## 2 Integers Powers Fundamental Equations

Ion Murgu Integers Powers Triangles are the triangles which, for every  $n \in \mathbb{Z}$  , connect  $(n + 1)$  consecutive Integers at power n with factorial of n. If analyze any n+1 consecutive Integers at power n using next method: make a table with  $(2n+1)$  colons and n rows, In first row first colon write  $(Z)^n$  , next colon let free, third colon  $(Z + 1)^n$  , then free space, and so on the last colon will be  $(Z + n)^n$  .

Now in second row under free spaces will be the differences between right and left terms of superior row, and so on for next .. After n differences you will obtain a single term which will be  $(n!)$  .

Table 1: Ion Murgu Integers Powers Triangle

$(Z^n)$	EMPTY	$(Z - 1^n)$	Emty	aaa	a	$(Z - n)^n$
....	$Z^n - (Z - 1)^n$	.....	.....	.....	$(Z - n + 1)^n - (Z - n)^n$	.....
....	.....	.....	.....	..	.....	.....
....	....	Any1	...	Any 2	.....	.....
....	.....	.....	$n!$	...	.....	.....

This is perfect valid also for its inverse , and is better then , because avoid the restriction of choosing  $(Z > n)$ , and then avoiding any mistakes.

$(Z + n)^n$	EMPTY	$(Z + n - 1)^n$	Emty	...	.....	$(Z)^n$
....	$((Z + n)^n - (Z + n - 1)^n)$ .	.....	.....	.....	$((Z + 1)^n - Z^n)$	....
....	.....	.....	.....	..	.....	.....
....	....	Any1	...	Any2	.....	.....
....	.....	.....	$(n!)$	...	.....	.....

Table 2: Ion Murgu Integers Powers Triangle 2

Sorry for inverse Mirroring ! This was my first approach of , and disarmed my then , because of any calculus errors. I was young , and trusted to much my calculus. This method is a method valid for easy test, because imply the work directly with the powers. And after the positive test, you can go to a formula. But after a long time , re provoked by Brachistochrone problem , presented on INTERNET in 2015, August, I returned to my old calculus and I get where I make mistakes, and observed I was right to luck in this direction. Then I completed.

## 2.1 Mathemaical Presentation-Getting Formula

The same result can be obtained , but imply more work , by writing every  $(Z^n)$  ,  $(Z - I)^n$  as F(t) and and making the calculus you

will get  $\{F(n) - K1nF(n - 1) + \dots + F(0) = n!\}$  or  $\{F(n) - K1nF(n - 1) + \dots - F(0) = n!\}$  . Trying it For Powers 2,3,4,5,6,7 I get The waited which isn't very heavy I get The same result and The Formula . After Calculus in this mode into formula the old connected to in a beautiful mode and will be stoned to see are included in directly powers Method also. So , making calculus for every power 3,4,5 6 and 7 separately and observing the redundancy, I make a program in Visual Basic and then in Java on Applet which to generalize, and to proof it, both worked , but on restricted areas . Lucking for performance I meet soon Perl with its Module BigIntegers and BigFloat , and started a new one which is working now at: [www.lifeclimatic.com/mmc.pl](http://www.lifeclimatic.com/mmc.pl) for powers ( $n < 51$ ) and will be extended. A Software without limits of powers used can be made also , but because of generating every time the Coefficients table will be hard times responsible.

1	1
2	1, 2 ,1
3	1,3,3,1
4	1,4,6,4,1
5	1,5,10,10,5,1
6	1,6,15,20,15,6,1
7	1,7,21,35,35,21,7,1
8	1,8,28,56,70,56,28,8,1
9	1,9,36,84,126,126,84,36,9,1
10	1,10,45,120,210,252,210,120,45,10,1
11	1,11,55,165,330,462,462,330,165,55,11,1
12	1,12,66,220,495,792,924,792,495,220,66,12,1
13	1,13,78,286,715,1287,1716,1716,1287,715,286,78,13,1
14	1,14,91,364,1001,2002,3003,3432,3003,2002,1001,364,91,14,1

Table 3: Integers Powers Triangle -Coefficients Table.

## 2.2 Formula

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (T + I)^n = n! \quad \text{Ion Murgu -}$$

Integers Powers Fundamental Equations

Where  $(m = I)$  for  $n$  even (par) and  $(m = I + 1)$  for  $n$  odd and  $(K_{nI})$  coefficients contained into Integers Powers Triangle -Coefficients Table and  $n$  isn't a power in , instead of  $((Z - I)^n)$  , where  $n$  is power.. At this time Formula same to be covering only  $\mathbb{N}$  but only about sign convention and about a double asymmetry introduced by unity, then this can be considered as having its proper image into  $\mathbb{Z}$  , excluding maybe, the area around ZERO where double unbalance from UNITY is speaking, but for further research I remind we meet it also in modern Math , and Riemann is there, in a sense, and it can be a non pertinent remark, because of a not totally analyze, the problem is the same. Anyway a easy way to get FORMULA (Ion Murgu - Integers Powers Fundamental Equations), I will describe with an example also . If will note for an Integer  $(Z > n)$ : with  $f_0 = (Z - n)^n$  ,  $f_1 = (Z - n + 1)^n$ , .....  $f_{n-1} = (Z - 1)^n$ ,  $f_n = (Z)^n$  and will make a table : (the dimension is orientable)

$f_0$	...	$f_1$	....	$f_{n-1}$	....	$f_n$
....	$(f_1 - f_0)$	....	....	....	$(f_n - f_{n-1})$	....
....	...	....	....	....	....	....
....	...	any	....	any	....	....
....	...	....	FORMULA	....	....	....

Table 4: Getting Formula Orientable Table

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (T + I)^n = n! \quad \text{Ion Murgu -}$$

Integers Powers Fundamental Equations

Integers Powers Fundamental Equations R Sided.

$f_0$	...	$f_1$	....	$f_2$	....	$f_3$
....	$(f_1 - f_0)$	....	$(f_2 - f_1)$	....	$(f_3 - f_2)$	....
....	...	$(f_2 - 2 * f_1 + f_0)$	....	$(f_3 - 2 * f_2 + f_1)$	....	....
....	...	....	$(f_3 - 3 * f_2 + 3 * f_1 - f_0)$	....	....	....

Table 5: Getting Formula for  $(n = 3)$

When I get The formula, into 2015,I published this form , which will have first term negative , because then I didn't pay attention to sign but to work. For it I yet keep this form as reminder of .

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (T + I)^n = n!$$

Integers Powers Fundamental Equations R Sided.

when real is good to use

$$\sum_{I=0}^n (-1)^m * (K_{nI}) * (Z - I)^n = n!$$

Integers Powers Fundamental Equations R Sided.

ION MURGU INTEGERS POWERS FUNDAMENTAL EQUATIONS ARE identities - **IDENTITIES** and for every Z Integer , with  $|Z| > |n|$  this is valid , but for all Z and n as power The Form is :

$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (Z + I)^n = n!$ <p>Integers Powers Fundamental Equations L Sided.</p>
---

Table 6: Integers Powers Fundamental Equations

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (Z + I)^n = n!$$



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## Integers Powers Fundamental Equations L Sided.

have property of addition and if will note , left side sum as  $S_Z$  is clear for same  $n$  :

1.  $(S_Z + S_Z) = 2n!$
2.  $(S_Z + S_T) = 2n!$
3.  $(S_Z - S_R) = 0$
4.  $(S_Z - S_T) = 0$
5. and so on all combinations

where Z,R,T are are positive Integers or negative in the same time. But also:

1. 
$$\left| \frac{S_Z}{S_T} \right| = 1$$
2. 
$$\left| \frac{S_Z}{S_R} \right| = 1$$
3. 
$$\left| \frac{S_R}{S_T} \right| = 1$$

3,4 from first Items , and all for second have Equivalence but because of theirs relative assembly around of **0 and 1** , because of utility, and as a pertinent reply to Euler God Equation I named those ION MURGU - GOD EQUATIONS OF BALANCE.

### **3 Fermat-Murgu Impossible Equations-presentation**

I named it so, because reveal The impossibility for  $n > 2$  as

---


$$X^n + Y^n - Z^n = 0$$

to have any solutions into Integers . For it we applied the property of additivity of **Fermat-Murgu n Media** to  $(X,Y,Z), (X-1,Y-1,Z-1)$  and we can do it for  $\frac{n+1}{2}$  into the left side and the same to the right, but for our scope will be enough one to left and its proper one. Doing it for  $(X,Y,Z)$ , we get **Fermat-Murgu First Grade Impossible Equations** which reveal as, Fermat Equations to have all solutions into integers , then, **Fermat-Murgu n Media** for 3 Integers associated will be unbalanced .

$$X^n + Y^n - Z^n = 0$$

$$\begin{aligned} & \sum_{I=n}^1 (-1)^m * (K_{nI}) * (X + I)^n \\ & + \sum_{I=n}^1 (-1)^m * (K_{nI}) * (Y + I)^n \\ & - \sum_{I=n}^1 (-1)^m * (K_{nI}) * (Z + I)^n + \\ & = n! \end{aligned}$$

as see, last term is missed, but because for  $n=2$  this have validity, to say is our sense of false perception, and it maybe is also

possible for any n's. Then to make the same for next left neighbor (X-1,Y-1,Z-1) , and after an easy matrices calculus , which with any skill can be intuitive because of symmetry on, we GET.

$$\begin{aligned} & \sum_{I=n}^2 (-1)^m * (K_{nI}) * (X + I - 1)^n + \\ & \sum_{I=n}^2 (-1)^m * (K_{nI}) * (Y + I - 1)^n \\ - & \sum_{I=n}^2 (-1)^m * (K_{nI}) * (Z + I - 1)^n + \\ & (X - 1)^n + (Y - 1)^n - (Z - 1)^n = n! \end{aligned}$$

and obtained from above' its coupled  
 $n(X^n + Y^n - Z^n) = 0$   
 Do not simplify, HERE IS hide a truth.

**Fermat-Murgu n Media** for 3 neighbors associated to X,Y,Z  
 brooked drastically and a Big surprise . As, Fermat's Last  
 Theorem for n>2, all solutions need to be Irrationals at the base.

$n(X^n + Y^n - Z^n) = 0$   
 Do not simplify, HERE IS hide a truth.  
**CERTIFY Fermat's Last Theoem**

---

**That mean :**

$$n(X^n + Y^n - Z^n) = U^n + V^n - W^n$$

With  $U^n + V^n - Z^n = 0$  also and to be solutions into Integers for Fermat's Last Theorem , but in the same time for our X,Y,Z - Integers to satisfy:

$$U = \sqrt[n]{n}X$$

$$V = \sqrt[n]{n}Y$$

$$W = \sqrt[n]{n}Z$$

Those Identities are Impossible, because we do not have

$$U = \sqrt[n]{n}X$$

an Integer multiplied with an Irrational Number never will be an Integer, we started from supposed X,Y,Z Integers. Period.

But to put it in a Mathematic contest,

Starting from a supposed solutions into Integers for:

$$X^n + Y^n - Z^n = 0$$

We know if - then:

$$J^n(X^n + Y^n - Z^n) = 0$$

As Infinite valid Images. But also

$$J(X^n + Y^n - Z^n) = 0$$

which have Fermat Equations related solutions (if), only for  $J = k^n$  with k Integers also

But for  $n > 2$  have also

---


$$J^2(X^n + Y^n - Z^n) = 0$$

and so on .

With Fermat Equations Solutions for  $J^2 = k^n$

But Starting the Analyze for a neighbor  $(X-1, Y-1, Z-1)$  we get

$$n(X^n + Y^n - Z^n) = 0$$

Revealing Double False Redundancy, and easy Treated with Euler - Murgu Equation 1=1 and also Excluded by Fermat-Murgu 3-th Grade Impossible Equations , but heavy we can see it even here imagining it in Irrational Filed as a bypass .

Lucking above, for  $n=3$  which will exclude also all  $n>2$  by intuitive synonymy, that mean : if

$$J^3 = 3$$

$$J = \sqrt[3]{3}$$

which is not bad , but

and

$$J^2 = \sqrt[2]{3}$$

which is bad

A false redundancy because need to be valid separately and to evolve from Irrational to Rational and then Integers. The process is multiply and a simple multiply can solve  $k_1$  to say, But second multiply will solve  $k_2$  but will turn back  $k_1$ .

Into Integers as Example For  $J^3 = 27$  ,  $J = 3$  , which isn't bad,

---

but  $J^2 = \sqrt[2]{27}$ , which is bad Then  $n(X^n + Y^n - Z^n) = 0$  is an absolute Conditional for  $n > 2$ .

For  $n=2$  Fermat-Murgu Second Grade Impossible Equations are Interruptive going out of Proper Triangle but have validity for Pythagorean Triple into Integers but not for a complete Analyze via last one, because are exceptions guarded of magic 2 and need to satisfy Only  $J$  and  $J^2$  and as example for

$$J^2 = 4$$

$$J = 2$$

which isn't BAD. Sorry for using only  $J$  for all but is to understand the connections.

## Fermat-Murgu Second Grade Impossible Equations SENT Fermat's Last Theorem in Fundamental.

### 3.1 $n=2$ Exception which confirm the rule?

We Get a finally answer from **Fermat-Murgu Second Grade Impossible Equations**, bur for our perception sense of  $\infty$  remain any unbalanced in, for  $n=2$  we have **Exceptions**, and will see for what, and also to not forgot for  $n > 2$  we have more **Fermat-Murgu t-th Grades Impossible Equations** which everyone exclude 2 times solutions in Integers. One time by **Fermat-Murgu n Media** new unbalance and second by

$$K_{nI}(X^n), K_{nI}(Y^n), K_{nI}(Z^n)$$

as solution, for  $n=3$  as example, this mean

$$6(X^3), 6(Y^3), 6(Z^3)$$

---

, that mean

$$\begin{aligned}U &= \sqrt[3]{6}X \\V &= \sqrt[3]{6}Y \\W &= \sqrt[3]{6}Z\end{aligned}$$

Now at a simple analyze, we see for what n=2 present exceptions:

$$\begin{aligned}U &= \sqrt{2}X \\V &= \sqrt{2}Y \\W &= \sqrt{2}Z\end{aligned}$$

are based solutions in irrational field too, but power is 2 and can be compensated by a multiply by any in proportions relative to all X,Y,Z with  $\frac{T}{\sqrt{2}}$  with T Integer. Begin with powers n>2 a multiply can't do it and then **The Answer** can stop here. But to continue our Analyze via **Euler - Murgu Equation 1=1**. which I named so because Euler was trying I think for n=3 to demonstrate - solutions are Irrational and the I supposed HIM know for what.



Fermat's Last Theorem was sent in fundamental into 2015 September 24 - By simple apparition of Ion Murgu Integers Powers Fundamental Equations , but as method via Fermat-Murgu Impossible Equations . On Internet is a lot of material , which even if presented in a allusive mode inside everyone contain a truth and collected reveal all. Working with so more coefficients, indices's , and powers and , sign conventions is possible to meet small errors , but the essence is there.

---

If you ask Me for what I did so: the answer is simple, 40 years I was in a sense out of Science, looking for a balancer there, and I do not have relatives for publishing and kept in the same time my rights for, and I was in knowledge by then - ONLY ION MURGU INTEGERS POWERS FUNDAMENTAL EQUATIONS CAN DO IT SENT Fermat's Last Theorem in Math and Science FUNDAMENTAL. and also I had a bad experience about when around of '85 or '90 I sent on Internet Fermat's Last Theorem Natural Solution which now have also validity but after knowing the BASE Solutions are In Irrational Field.



**FERMAT-MURGU SECOND GRADE IMPOSSIBLE EQUATIONS ARE ABSOLUTE CONDITIONALS - and all are , begin with second, but for Fermat's Last Theorem SENT in Fundamental second, already did this.**

Our Conventions signs , can't Exclude Fermat-Murgu Second Grade from Integers because, by Symmetry if one of X or Y is negative Then Fermat Equations are mirrored into the same form and for n - negative is synonym with a movement in Rational and we know Now

if

$$\frac{1}{X^n} + \frac{1}{Y^n} = \frac{1}{Z^n}$$

then

$$Y^n Z^n + X^n Z^n = X^n Z^n$$

have symmetry for the same problem

$$A^n + B^n = C^n$$



---

Magic two have is right to Exceptions which Confirm The Rule  
because in the simplest Words :

$$\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}} = \sqrt{2}$$

and then:

$$J\left(\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}}\right) = J(\sqrt{2})$$

)

but never

$$2J^2 = Z^2$$

will be a Fermat's Last Theorem Exception or a Pythagorean Triple into Integers, but only repartitions of  $J = k + l$ , with  $k \neq l$ , and those Exceptions can bypass Double False Redundancy

$$J^2(X^2 + Y^2 - Z^2) = 0$$

and

$$J(X^2 + Y^2 - Z^2) = 0$$

For J's of form

$$J = 2I$$

, for I Integers and excluded all which have common Factor

$$2^k$$

and then: but last material is for Future research for Pythagorean Prime and Ion Murgu Circles Paradox. Also Fermat Exceptions can be easy understand via Euler - Murgu Equation  $1=1$ .

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## 4 Fermat's Last Theorem-Fundamental.

What really brought FERMAT-MURGU SECOND GRADE EQUATIONS?  
Apparently nothing new , we know, If

$$\begin{aligned} & X^n + Y^n - Z^n = 0 \\ \text{then } & J^n(X^n + Y^n - Z^n) = 0 \end{aligned}$$

which is a simple truth , but JX, JY and JZ are independent values, and can be named mirrored images by multiply. But Now:

$$n(X^n + Y^n - Z^n) = 0 \text{ are absolute conditional ,}$$

$$\begin{aligned} \text{Solutions for : } & X^n + Y^n - Z^n = 0 \\ & \text{are of form} \\ & \frac{X}{\sqrt[n]{n}} , \frac{Y}{\sqrt[n]{n}} , \frac{Z}{\sqrt[n]{n}} \end{aligned}$$

**Fermat-Murgu Impossible Equations** brought 2 Ways, which  
**CERTIFY Fermat's Last Theorem :**

- Fermat-Murgu n Media, for 3- Integers Fermat Equations connected, Unbalanced , or eroded from it's natural form.
- begin with Fermat-Murgu Second Grade to n, SENT all or two into Irrational field. Double false redundancy now, is under control and not longer foolish us.

**Double false redundancy of truth.** We have two Identities

$$\begin{aligned} & \text{with value absolute truth, If} \\ & X^n + Y^n - Z^n = 0 \\ \text{then : } & J(X^n + Y^n - Z^n) = 0 \end{aligned}$$

---

image of first but back of simplify have independent values, which for  $J = K^n$  are viable Fermat Equations, and also:

$$J^n(X^n + Y^n - Z^n) = 0$$

which do not reflect into integers first one, but have validity also:

THIS is a Double false redundancy of truth which reveal by hiding the Image for Fermat Equations and evolution - Irrational - Rational - Integers (When is the case.). But for us now, coming

from Fermat-Murgu Second Grade Impossible Equations  
 $n(X^n + Y^n - Z^n) = 0$  **The Last one Become an absolute Conditional one** break the chain and : **SENT**

**Fermat's Last Theorem in FUNDAMENTAL by generalizing over all n's.**

As will see, Pythagorean Triple, are exceptions which confirm the rule. The Redundancy:

$$X^n = n^{(n-1)}U^n, Y^n = n^{(n-1)}V^n, Z^n = n^{(n-1)}W^n$$

is now excluded. **FERMAT'S LAST THEOREM NOW IS FUNDAMENTAL**

**and with a pure and accurate mathematically solution coming from**

**FERMAT-MURGU IMPOSSIBLE EQUATIONS.** But for sure The Analyze will not end here, and then also Euler - Murgu Equation  $1=1$ , and Ion Murgu- Fermat's Last Theorem Natural Solution, will had to have a role in. Those had a heavy Perception and can't exclude the mathematics purity of Fermat-Murgu Impossible Equations.

---

## 5 Euler - Murgu Equation 1=1.

Over all fields (Irrational - Rational Integers) we have for every n Integer, five Equations which connect with value of truth our fields:

$$X^n + Y^n - Z^n = 0$$

$$J^n(X^n + Y^n - Z^n) = 0$$

$$J(X^n + Y^n - Z^n) = 0$$

$$\frac{1}{J}(X^n + Y^n - Z^n) = 0$$

$$\frac{1}{J^n}(X^n + Y^n - Z^n) = 0$$

Three of them with a perfect validity in all fields , two only in one Irrational and occasionally in all three when  $J = K^n$  . Those equations contain all evolving process form a field to another if we have any solutions into Integers or Rational, and is an absolute truth if in Rational then in Integers too, and inverse.

**There also is hided what I named a double false redundancy of truth. Into Irrational J can be Integers and all five have validity into IRRATIONAL, can be Irrational of form  $J = KL$  with L Irrational and K Integer and Then (we started form X,Y,Z Irrationals)at any points one Of (X,Y**

---

or Z) can evolve to Integer but never two of them, and it we will see into Euler - Murgu Equation 1=1.

Now guarded by those, and also by a actual Imposed Condition By Fermat-Murgu Impossible Equations

$$n(X^n + Y^n - Z^n) = 0$$

will help us to strong the truth, and only for, knowing the base solutions need to be in Irrational Field, we can make a supplementary Analyze Starting for **Fermat's Last Theorem** reported to UNITY, to not say in Rational Field because instead of '94 PROOF we know - not solutions there for  $n > 2$ . For it we will divide  $X^n + Y^n = Z^n$  with  $Z^n$  and will get:

$$\frac{X^n}{Z^n} + \frac{Y^n}{Z^n} = 1$$

, to note:  $A^n = \frac{X^n}{Z^n}$  and  $B^n = \frac{Y^n}{Z^n}$  , and then to analyze it for  $A^n$  and  $B^n \in (0, 1)$  . Because are 2, then is synonym with Analyze into  $A^n$  and  $B^n \in (0, 1/2)$

### 5.1 Euler - Murgu Equation 1=1. Notes.

Because I turned on this equation , considering any part as intuitively perceptible , I returned here with any notes. Any times the passing between an Irrational number and its image into Unity maybe need explained.

- **Every Irrational Number have its Image in UNITY as its proper form minus its Integer part.** , then :

- 
- **Into Integers The Complementary of an Irrational Number  $>1$  , will be an Irrational Numbers  $<1$  and perfect reflected into Unity treatment.**
  - **Every Irrational Number  $<1$  will complete the Unity only and only by a sum with its Complementary Relative to Unity.** If Note with A the Irrational Number  $<1$  , and B its Complementary Then only and only  $A+B = 1$ . DEMONSTRATION:

$$\sum_1^k A = 1$$

synonym with

$$kA = 1$$

and then

$$k = \frac{1}{A}$$

which is Irrational by definition. But to take our needed Irrationals

$$\sqrt[n]{n}$$

as example : we get:

$$k \sqrt[n]{n} = 1$$

then

$$k^n * n = 1$$

$$k^n = \frac{1}{n}$$

$$k = \frac{1}{\sqrt[n]{n}}$$

Euler Demonstrated it, even if it stand up in the simple definition

---

of a Irrational Number "A  $IA$  for any I integers never will be a Integer. But into Unity also we can write

$$A + (1 - A) = 1$$

to transform Irrational Part to Integer is clear we need to multiply with any like  $\frac{k}{A}$  , then :

$$1 + \left(\frac{k}{A} - 1\right) = \frac{k}{A}$$

and here is our double false redundancy coupled with our habit to simplify revealed. We are not in a Analyze if  $1=1$  , we know it , but to analyze if exist an evolving to Integers by sum or multiply.This is second face of it  $1=1$  , but only as a sum between an Irrational and its Complementary to Unity. if

$$A^1 = \frac{k}{A}$$

we get

$$A^1 + (1 - A^1) = 1$$

**k can't be Integer and for our case is simple to demonstrate, because we know our A have form  $\sqrt[n]{n}$ . But also for general A. For General A Irrational: If  $kA = I$ , we have then  $fkA = fI$  but also Imply an  $\frac{A}{g} = J$  for  $fI = J$  we have**

$$gfk = 1$$

..... g can be rational , but doesn't mater so much.

## 5.2 Mathematical Presentation(Euler - Murgu Equation $1=1$ .)

Now for easy work we also will notate  $C = A^n$  and  $D = B^n$  and will return to everybody when need so. A graphical representation can to be needed but need large space maybe for , I will try.

---

●

I will define a new field , special one Irrational-S which for  $n > 2$ , are Irrational Numbers into Irrational Field of form:

$$\sqrt[n]{n}$$

and

$$\frac{1}{\sqrt[n]{n}}$$

and theirs multiples with Integers as Irrationals Images. You will meet here a Special Irrational Numbers also in

My old Material on Internet. I named those Special because we can say can be transfered into Integers by n-times proper multiply or by powering. **Ion Murgu Irrational-S and its Complementary- Postulate**

●

*Every Irrational-S Number have its IMAGE into Unity and its Complementary connected to unity is also an Irrational-S number, and theirs image in unity are connected in a false double redundancy of truth.*

●

Demonstration: We can write  $C + D = 1$  as  $C + (1 - C) = 1$  trying to eliminate the Irrational from left side by multiply, we need to multiply with  $\frac{1}{C}$  then : we get  $1 + (\frac{1}{C} - 1) = \frac{1}{C}$



---

mirroring it (for  $C = \text{Unity}$ ) into Euler-Murgu Equation  $1=1$ , and if note  $F$  is equivalent with  $1 - \frac{1}{C}$  we get also

$$F + (1 - F) = 1$$

we are now in the front of a new Irrational Repartition Relative to Unity and there will be not a Rational or Integers proportionality which to pass one to another by multiply, but only and only  $C$  which is Irrational-1. **Then: With rights of theorem maybe , but I will let for youngest to evolve it, maybe a little bit more: We can say for  $n > 3$  Fermat's Equations Base Solutions In Irrational , never will can evolve to Rational and Integers.**

### 5.3 Pythagorean Triples into Integers- Fermat's Last Theorem Exceptions

|  
**OBSERVATION:**

This subsection will be- I hope- soon complete. Is yet a Subject of research area and you can meet supplementary material about at: "[www.shoetheory.net/Pythagoras/CirclesParadox.html](http://www.shoetheory.net/Pythagoras/CirclesParadox.html)" and "[www.shoetheory.net/Pythagoras/PytP1.html](http://www.shoetheory.net/Pythagoras/PytP1.html)" then consider it Orienteering for a while.

|  
 $\sqrt[2]{2}$

are Irrational Numbers but are not Irrational-S Numbers because admit Exceptions form and it is included as a hide Truth in : The simple equation

$$2 * X^2 = 1$$

---

which do never will evolve into Pythagorean Triple into Integer as Exception because: are excluded by Fermat-Murgu n Media from first and Second Grades Impossible Equations and expressed into Integers - 2 equal Integers can't to assure a Geometric Media for an Fermat Equation into Integers

But we can Postulate:

For  $n=2$  , All Unity Repartitions of gen :

$$FA + (1 - FA) = 1$$

with

$$F = \frac{K^2}{L^2}$$

will evolve into an Fermat Equation with solution into Integers . As we know :

$$\begin{aligned} U &= \sqrt[2]{2}X \\ V &= \sqrt[2]{2}Y \\ W &= \sqrt[2]{2}Z \end{aligned}$$

then for all

$$fA + (1 - fA) = 1$$

with f Rationals excepting  $fA=(1-fA)$  we will have a Fermat Equation image into Integers then Infinity Independent Pythagorean Triples. What mean Independent in our ? Every first image into Integers of

---

an evolute from Irrational-Rational will have also  
Infinity Images Into Integers in accord with

$$J^2 * X^2 + J^2 * Y^2 = J^2 Z^2$$

which out of simplify are Integers also, which are  
composite and not Independent. Now we have the  
Infinity Z's which can't to be write as  $X^2 + Y^2$ ,  
reflected into Euler-Murgu Equation  $1=1$ , those are  
coming from

$$\frac{1}{f\sqrt[2]{2}} \neq 1$$

with when Pythagorean Triples into Rationals, are  
coming from

$$\frac{1}{f\sqrt[2]{2}} = 1$$

then:

**if note  $f=q/t$   $q$  and  $t$  integers we get an  
orientative equations for, or conditional:**

For Pythagorean Triples into Integers :

$$q = t\sqrt[2]{2}$$

For Pythagorean Prime :

$$q \neq t\sqrt[2]{2}$$

Is without any sense to determine all

$$q, t \in \text{Irrational}$$

---

s , or one Integer and then one Irrational, but as orientation is a good step.

Example for X=3, Y=4 ,Z=5

Fermat-Murgu First Grade Impossible Equations for have validity this time, but is only because also for power 2 an Integer  $Z^2$  can be write also as

$$Z^n = \sum_{I=1}^{Z+1} (2 * I - 1) - \text{you can check it, I did.}$$

Fermat-Murgu n Media Second Grade also have validity, you can check , I did, and also second grade Impossible, reveal for us The rational solution which is easy 3/5, 4/5 and from here to a base in Irrational

$$\left(\frac{9}{25\sqrt{2}}\right) + \left(\frac{16}{25\sqrt{2}}\right) = 1$$

I remind i=Unity here is our Irrational Unity  $\frac{1}{\sqrt{2}}$  and to not be tented to simplify I kept it as I said, (Now we can speak about a base form in Irrational which to evolve in Rational, I didn't make a perfect analyze to see it is exactly our example, is not so important now). As you see first Pythagorean Triple have is Fermat's Last Theorem Image in Irrational when is Sharing Unity into  $\sqrt{2}$  25 PARTS  $1 = 25\sqrt{2}$  or  $1 = 25\frac{1}{\sqrt{2}}$  **Pythagorean**

**Triple into integers satisfy also:**

$$n(X^n + Y^n - Z^n) = U^n + V^n - W^n$$

reconfirming are exceptions coming from

MAGIC 2

---

which is in found a simple property of 2, copled with power 2:-2 is our first number if consider 1 (UNITY)-Generator.

-and power 2 is aproprate to a multiplay also as syntaxing concepts.

As Fermat-Murgu Impossible Equations Prove , and also Euler - Murgu Equation  $1=1$  , Pythagorean Triples into Integers are Exceptions and Blessed Exceptions which confirm the rule and it because of Magic 2 and because :

$$\sqrt{2} * \sqrt{2} = 2$$

when

$$\sqrt[n]{n} * \sqrt[n]{n} \neq n$$

Expressed in a banal Mode , but explained in all materials.

Now , my sense for Description can be avoided by the immensity of problem and I don't exclude any small errors on, but in time I will return n-times for repairs if needed. Fermat Murgu Impossible Equations and Euler - Murgu Equation  $1=1$ , present Pythagorean Triples into Integers as Fermat's Last Theorem Exceptions and are also EXCEPTIONS Which Confirm The Rule. **I promised a graphic but I will say is impossible to make it, because, first, is to large dimensionally, and second seem impossible to follow all dependencies**

of sharing proportionally Unity into reports, relatives to  $\sqrt{2}$  and  $\frac{1}{\sqrt{2}}$  which not all are evolving apparently (really only  $X = Y$  are excluded ) into Fermat Equations  $\in$  Integers . Maybe my expose

---

into this subsection was a little dizzy , and possible I lost any into explanation, but we can express it into a Theorem for future.

Ion Murgu Theorem Of Evolving Pythagorean Triples.  
 All Independent Pythagorean Triple Into Integers have images into Irrational via Euler - Murgu Equation  $1=1$  denoted in a double redundancy reflected into validity for a type Equations

$$fA + tB = 1$$

and

$$f^2 + t^2 = 1$$

, satisfied in the same time, and with  $f,t,A,B$  are Irrationals, and proportionately related also to a double factors taken separately ;  $\sqrt{2}, a$  and  $\frac{1}{\sqrt{2}}$  (which can bring also any confluences, but heavy to follow).

And as reminder A and B are  $A = \frac{X^2}{Z^2}$  and  $B = \frac{Y^2}{Z^2}$  **All Integers Begin with  $J > 2$  Integers are implied into Left or Right side of Pythagorean Triple, and it denote Pythagorean Triple are Infinity Relative to Fermat Equations for  $n=2$  -  $X^2 + Y^2 = Z^2$  , but we have also a Characteristic gen Prime Numbers Related to Right Z, to say Pythagorean Prime Not all Z Integers can be wrote as  $Z^2 = X^2 + Y^2$  into Integers.** Please don't forgot, this subsection is yet into research area , and then have the right for modifications. In found our problem is can we determine all Pythagorean Prime by a Math Formula, and right now I can't assure we have one.

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## 6 Fermat-Murgu Quadruplets

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For the moment , Fermat- Murgu Quadruplets is in Work(for formatting in LaTeX), but you can see it on Internet at Youtube, Google and Facebook

•

For Power  $n=3$  , Coupling, for a short Analyze, Fermat-Murgu n Media with Ion Murgu - God Equations Of Balance, I saw Fermat-Murgu Quadruplets have the Property, like Pythagorean Triples into Integers for Independent solutions for Fermat- Murgu Quadruplets Equations

$$x^3 + y^3 - z^3 = 1$$

and

$$a^3 + b^3 - c^3 = -1$$

which for symmaetry can be wrote as

$$c^3 - a^3 - b^3 = 1$$

and I get 3, but one of them is old know as (6,8,9,1), then mine are (71,138,144,1) and (73,144,150,1) and late I saw on Internet an Impressive one get By Ramanujan , impressive because is biggest (65601,67402,83802,1) . There do not exist motivation to not be more, and maybe  $\infty$  , then around of Pythagorean Triple , Fermat-Murgu Quadruplets are a new beauty Group for Numbers Theory, and can have the same importance or even more.

Fermat-Murgu Quadruplets brought a simple , Intuitive, but with

---

a beauty remark of power 3 defining its proper Numeration System via first equation:

$$L * x^3 + L * x^3 + L * z^3 = L$$

a simple childish observation, but also theirs complementary image Into Integers

$$L^3 * x^3 + L^3 * y^3 + L^3 * z^3 = L^3$$

with L covering all Integers.

### 6.1 Fermat-Murgu Quadruplets a Complete Modular Method

Theirs validity and the form of equations define an Complete Modular Method Incontestable. The explanation is simple , The existence of

$$x^3 + y^3 - z^3 = 1$$

and/or  $-1$  offer for

$$I(x^3 + y^3 - z^3) = I$$

, which back of simplify contain the REST which cover all Integers excepting 0.

$$x^3 + y^3 - z^3 = 1$$

and

$$c^3 - a^3 - b^3 = 1$$

wrote also as

$$X^3 + Y^3 - Z^3 = I^3$$



---

and

$$E^3 - V^3 - W^3 = I^3$$

with  $X=Ix$  ,  $Y=Iy$ ,  $Y=Iz$  and there are all  $I^3$  ,I mean cover all Integers, then became a natural Modular Method for Fermat's Last Theorem ,  $n=3$ . On Internet I sent a lot of types of solutions , which to proof it, and the answer that Fermat-Murgu Quadruplets are The Proof of Proofs for  $n=3$  for Fermat's Last Theorem is simple , and to analyze first form.

$$X^3 + Y^3 - Z^3 = I^3$$

which wrote as

$$X^3 + Y^3 = I^3(1 + z^3)$$

but also an

$$X_4^3 + Y_4^3 = I(1 + z^3)$$

Covering all  $I \in Integers$  ,then for a supposed Fermat Equation

$$U^3 + V^3 = W^3$$

with solutions Integers we can wrote

$$U^3 = \frac{X_1^3 + Y_1^3}{(1 + z^3)}$$

$$V^3 = \frac{X_2^3 + Y_2^3}{(1 + z^3)}$$

---


$$W^3 = \frac{X_3^3 + Y_3^3}{(1 + z^3)}$$

Then Finally:

$$X_1^3 + Y_1^3 + X_2^3 + Y_2^3 = W^3(1 + z^3)$$

or

$$X_1^3 + Y_1^3 + X_2^3 + Y_2^3 = W^3(x^3 + z^3)$$

to note it Ec.1. forgot to simplify for a while this bring a equality which need to be satisfy for also independents Integers . There is a conjecture point between

$$J^3(U^3) + J^3(V^3) = J^3(W^3)$$

and

$$k^3(x^3 + y^3 - z^3) = J^3W^3$$

heavy to see because

$$J^3(U^3 + V^3) = J^3W^3$$

and then

$$k^3 = J^3W^3$$

Then Ec.1 will be :

$$(X_1^3 + Y_1^3 + X_2^3 + Y_2^3)k^3 = J^3(W^3)(x^3 + z^3)$$

---

This Equation need to exist also Independently, if simplify , you will get  $1=1$ , because  $U^3 + V^3 = W^3$  supposed to be a truth , but back of it all integers implied now must to exist also independently. If this Conjecture Point then need to have redundancy to Infinity, to be repetitive. This add a false redundancy of truth, when

$$k^3(U^3 + V^3) = J^3W^3$$

valid only and only for  $k=J$  , REDUNDANCY VOIDED mean:

$$U^3 + V^3 - Z^3 = 0$$

do not have any values into Integers.

**Feramt's Last Theorem for n=3 Certified by a COMPLETE MODULAR METHOD.** Fermat-Murgu Quadruplets treated as Independents Values Related to a supposed valid

$$U^3 + V^3 = W^3$$

mean

$$A^3 + B^3 - C^3 = W$$

and

$$E^3 + F^3 - G^3 = W^3$$

but also

$$K^3 + L^3 - M^3 = W^2$$

with A,B,C,E,F,G,M,K,L - all Different Integers, which is absurd HIDDEN in Double False Redundancy of Truth. But this is Excluded simply and with math Clarity by Fermat-Murgu Second Grade Impossible Equations , which maybe is the time to re repeat - **ARE ABSOLUTELY CONDITIONALS.**

---

## 7 Ion Murgu-Fermat's Last Theorem Natural Solution.

**Fermat's Last Theorem was Certified without any doubts and with ACCURACY**

by Fermat-Murgu Impossible Equations which SENT for every X,Y,Z for Fermat Equations

$$X^n + Y^n - Z^n = 0$$

into Irrational even if one of them is Integer, then next 2 are Irrationals.

And it is Reflected also in Euler - Murgu Equations  $1=1$ , by simple taking of Z over all Integers and then considering Z UNITY, we Demonstrated before  $A + B = 1$  A,B Irrationals, for our Problem. But I am proud to remark, an old Method which I posted on Internet around of '87 -'90 after sending solutions in Irrational, have now validity. This was based on a redundancy of truth, IF

$$X^n + Y^n - Z^n = 0$$

then infinity Images

$$J^n(X^n + Y^n - Z^n) = 0$$

And at the time I said: Then we have an independent Equation

$$U^k + V^k - W^k = 0$$

which need admit

$$U^t U^n + V^l V^n - W^f W^n = 0$$

---

and

$$U^t = V^l = W^f$$

and also

$$t = l = f$$

which is absurd and now using Euler - Murgu Equation  $1=1$  easy to demonstrate. Now to say this is hidden in common factors of  $U, V, W$  and then to write

$$A^n(X^n + Y^n - Z^n) = 0$$

, with  $U = AX$ ,  $V = AY$  and  $W = AZ$  .

As we Know from Fermat-Murgu Second Grade Impossible Equations also this  $A$  need to be of Form

$$A^n = Kn$$

and then

$$K = L^n n^{n-1}$$

an Infinity loop of false redundancy, but over all I think we can make a STOP because that mean

$$W^n, U^n, V^n$$

need to have common Factors also

$$n^n, n^{n-1}, n^{n-2} ..n$$

which is Impossible and is what

$$n(X^n + Y^n - Z^n) = 0$$

---

already said and by a Exclusion Conditional  
 Now I am sure this Demonstration can stand up also by itself but  
 guarded by heavy perception, the Method what Certify **Fermat's  
 Last Theorem** with accuracy and with not doubts is Fermat-Murgu  
 Impossible Equations via Ion Murgu Integers Powers Fundamental  
 Equations. And did it onto 2015 September 24, is on Internet every  
 where.

## 8 Ion Murgu - Infinity Divergent Conjecture.

Combining now all what we get starting from **Fermat's Last  
 Theorem** considered now as Fermat Equations ,

$$X^n + Y^n - Z^n = 0 \text{ then}$$

$$\frac{X^n}{Z^n} + \frac{Y^n}{Z^n} = 1$$

solutions for are in Irrational and Rational , and Rational will  
 impose solutions in Integers too. Fermat-Murgu k-th grades Impossible  
 Equations are conditioning solutions into Integers (is conditional,  
 and then a necessity) are if only and only

$$K_{nI} \left( \frac{X^n}{Z^n} + \frac{Y^n}{Z^n} \right) = K_{nI}$$

and back of simplify, this is an Independent Conditional which need  
 to be satisfied by Independents values.

**We know this CERTIFIED Fermat's Last Theorem,  
 but now to Analyze if there we have any Conjectures which  
 to offer a solution for a Modular Method. A Modular  
 Method by the Accuracy of Math imply**

---


$$X^n + Y^n - Z^n = 1$$

, so it will cover all Integers (I remind to everybody Fermat's Last Theorem is referring to Integers).

Adapting Euler - Murgu Equation  $1=1$  to it, we get

$$U^n + V^n = K_{nI}$$

with  $U^n = \frac{K_{nI}X^n}{Z^n}$  and  $V^n = \frac{K_{nI}Y^n}{Z^n}$

$$U^n + V^n = K_{nI}$$

there are all Conjectures , and for  $n > 2$  Multiples as numbers , theirs count is related to

$$Count = \left(\frac{2n + 1}{2}\right)$$

and as  $n$  tend to infinity so the count .

**Our Conjecture is one time Infinity Divergent, but also as you will see , SECOND Time too.**

We know Now, via Fermat-Murgu Impossible Equations , for  $n > 2$  even for  $Z$  Integer or another ones there are not solutions into Integers for Fermat Equations, but that don't mean the analyze need to STOP here.

For it to take Fermat-Murgu Second Grade Impossible Equations and to reflect on.

$$U^n + V^n = n$$

By considering  $n$  as UNITY we are hiding a Infinity Divergent

---

Conjecture Related to every n as constituent part. Then we need to understand **Euler - Murgu Equation 1=1** for every n>2 REVEAL first not a CONJECTURE but an IMPOSSIBILITY. Related to Fermat Equations is ABSURD to define a Conjecture when we are in front of Divergence and is a Mathematically pleonasm to do it.

### 8.1 Modularity and Fermat's Last Theorem.

A modular Method can't To be afforded need to know if is able to determine all the rest's by a mathematical formula or method.

Fermat's Last Theorem complexity, don't give us any permissions to avoid Math priority - Rigor .

Then, related to Fermat Equations Is an Absolute Truth if:

$$X^n + Y^n - Z^n = C_i$$

then

$$I^n(X^n + Y^n - Z^n) = I^n C_i^n$$

but if we don't have any

$$|C_i| = 1$$

we do not can apply modularity with all rigor accuracy. For Fermat Equations,

$$n = 3$$



---

present first and the last modular property, for which we can apply modularity, and the Method for sure need to be afforded via Fermat-Murgu Quadruplets , to use function

$$x^3 + y^3 - z^3 = 1$$

or

$$x^3 + y^3 - z^3 = -1$$

and the then FALSE CONJECTURE Point

$$I^3(x^3 + y^3 - z^3) = U^3 + V^3$$

But it is possible , only and only because we have here a  $C_i = 1$  , for  $n > 3$  , is impossible to demonstrate if any  $n$ 's meet also

$$x^n + y^n - z^n = 1$$

or

$$x^n + y^n - z^n = -1$$

and then a modular method can't generalize our Fermat's Last Theorem.

•

Via Fermat-Murgu Impossible Equations we have Appropriate Fermat Equations Conjectures,we know now  $X^n + Y^n - Z^n \neq 0$  then  $C_{ij}$  from

$$(X_i^n + Y_i^n - Z_i^n) = C_{ij}$$

but those are absolute Conditionals Conjectures and are not our

---

real minimal conjectures related to  $C_{ij}$  We can't Say we will determine all  $C_{ij}$  , starting from :

$$K_I^n(X^n + Y^n - Z^n) = 0$$

but those must to be appropriated, are loosed terms as

$$X^n + Y^n - Z^n = 0$$

to be ZERO into Integers but not The real  $C_{ij}$ 's. . But if we want, and is maybe for nothing, we can approach for by using Euler - Murgu Equation  $1=1$  , adapted for every n, as example for:

- n=2

$$\frac{k_1}{\sqrt{2}} + \frac{k_2}{\sqrt{2}} + C_{ij} = I \frac{I}{\sqrt{2}}$$

for  $C_{ij} = 0$  we have Pythagorean Triple into Integers. I is covering all Integers.

- n=3

$$\frac{k_1}{\sqrt[3]{3}} + \frac{k_2}{\sqrt[3]{3}} + C_{ij} = I \sqrt[3]{3}$$

all  $C_{ij} \neq 0$  for sure.

With heavy work we can, at the last minimal ones , but for  $n = 3$  we already know ALL

$$C_{ij}$$

's are Covering all Integers excluding 0 .

- 
- n=4

$$\frac{k_1}{\sqrt[4]{4}} + \frac{k_2}{\sqrt[4]{4}} + C_{ij} = \frac{I}{\sqrt[4]{4}}$$

for all  $C_{ij} \neq 0$  for sure.

With heavy work we can, at the last minimal ones. And can have a image by simple making

$$k_1 = k_2$$

- n=5

$$\frac{k_1}{\sqrt[5]{5}} + \frac{k_2}{\sqrt[5]{5}} + C_{ij} = \frac{I}{\sqrt[5]{5}}$$

for all  $C_{ij} \neq 0$  for sure.

With heavy work we can, at the last minimal ones. And can have a image by simple making

$$k_1 = k_2$$

- ...

and so on

- **Fermat's Last Theorem been SENT in FUNDAMENTAL by Fermat-Murgu SECOND Grade Impossible Equations - the last is Analyze for future. And Infinity Loop is forcing us to do it only for appropriates n's and to conclude the rest from, but not to go out of rigor.**



---

With all respect , I will say , I see here already first germ of DIVERGENCE, and I don't excluded, is a summary analyze for , but sufficient one. By making  $k_1 = k_2$  and  $I = n$  which offer an appropriate I think minimal Condition: or a minimal

$C$

**IF Convergences had to have Conjectures, Then Divergences had to ... have.**

## 8.2 Modularity Confusion.

Modularity related to Fermat Equations is based on :

$$I^n(X^n + Y^n - Z^n) = C_{ij}$$

even if is hiding it in false axioms this can't hide ,  $C_{ij} \in Z$  , are Conditionals Integers which EXCLUDE form all  $C_{ij} = L^n$ , with also  $L \in Z$  , and it need to be PROVED.

A Modular Method, to be applied as a Certified Mathematically Method, we need to have also as Certified , for every n;

$$(X^n + Y^n - Z^n) = 1$$

validated

and then to can evolve(generate) a General and fundamental Modular Method as

$$I(X^n + Y^n - Z^n) = I$$

A Modular Method need to demonstrate first for all  $n$ 's we have

---

validity for Equations ::

$$x^n + y^n - z^n = 1$$

or

$$x^n + y^n - z^n = -1$$

those is the Inversions Conjecture Points and reveal only for  $n = 3$  into Integers

$$X^3 + Y^3 - Z^3 \neq 0$$

For  $n > 3$  we can afford those Equations because we can't proof if :

$$x^n + y^n - z^n = C_{ij}$$

then

$$C_{ij} \neq L^n$$

where L Integer.

**Only Fermat-Murgu Impossible Equations can CERTIFY Fermat's Last Theorem. PERIOD**

**Euler - Murgu Equation 1=1 can't be confused with a modular method. Contrary, it is excluding Modularity by Demonstrating its IMPOSSIBILITY. Neither can make a confusion for Ion Murgu Fermat's Last Theorem Natural**

---

**Solutions. Then to remark both of them have at base:**

$$U^n + V^n = 1$$

only and only for U and V Irrationals.

Do not Confuse the presence of Unity there, as a possibility for a Modular Method. This Unity is at the base, any like

$$\frac{1}{\prod_t^n K_{nI}}$$

or

$$\prod_t^n K_{nI}$$

as  $\prod$  but also as independent values  $K_{nI}$  , We treated until here only

$$K_{n1}$$

or  $n$  because is enough to demonstrate

To calculate every  $C_{ij}$  is a titanic work and can be without sense, but we can make an IMAGE on. Now following last Subsection, we can wrote it in Integers as

$$2X^n + C_m = Z^n$$

We know  $Z^n > 2X^n$  , and then only for a proportionality Calculus, and nothing more right now. Then Taking  $X^n$  as parts and  $Z^n$  as relative unity, and also We have from Fermat-Murgu Second Grade Impossible Equations a proportionality related to  $X^n + Y^n - Z^n = 0$

---

If write it in Irrational apparently we have :

$2p + C = 3p$  for  $n = 3$  it is perfect valid because second and 3-th Fermat-Murgu Impossible Equations have symmetry for 3

- Second  $Z^3 = 3Z^n, X^3 = 3X^3, Y^3 = 3Y^3$
- 3-th  $Z^3 = -3Z^n, X^3 = -3X^3, Y^3 = -3Y^3$
- sorry for using the same X,Y,Z, is for remind the forms needed.

But for  $n > 3$  Second and 3-th already are losing SYMMETRY. Fermat-Murgu Impossible Equations are coming with :

- Fermat-Murgu n Media for 3 Integers Fermat's Last Theorem Connected or simple , Fermat Equations Related for Integers multiple times UNBALANCED.
- Fermat-Murgu k-th Impossible Equations which REVEAL The missing parts as **Fermat's Last Theorem** to be a Truth into Integers

$$K_I^n \sum (X^n + Y^n - Z^n) = 0$$

Maybe in the future we can GET a General function which to reveal all  $C_{ij}$  , but by now is clear there is coming a multiple DIVERGENCE.

- A general formula for  $C_{ij}$ 's is a problem of FUTURE, but **Fermat's Last Theorem** was SENT in Fundamental by Fermat-Murgu Impossible Equations ALREADY.

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# Only and Only Fermat-Murgu Impossible Equations can CERTIFY with ACCURACY

Fermat's Last Theorem.

Euler - Murgu Equation  $1=1$  . and Ion Murgu  
Fermat's Last Theorem Natural Solutions also  
can do it , but are guarded by

Fermat - Murgu Impossible Equations  
by making perceptible

double false redundancy. **Fermat-Murgu Quadruplets**  
**REVEAL** a single Modular Conjecture for  $n=3$ , but unfortunately is first and  
the last.

## 9 Fermat-Murgu Theorem or P versus NP Impossible

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Also For the moment , Fermat- Murgu Theorem is in Work  
(for formating in LaTeX), but you can see it on Internet  
at Youtube, Google and Facebook

•

•

This material do not have nothing to do with our Civil Society  
Controversial about **Artificial Intelligence**, but only and maybe  
can be considered as an Human Dignity release. •



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### 9.1 Fermat-Murgu n Media.

As we know, a pure Algebraic Media is denoted by:

$$\frac{\sum_1^n}{n}$$

and I posted it here as a proposal to define also as a Geometric Media starting from Pythagorean Triple, as:

$$AB = \frac{(A + B)^2 - C^2}{2}$$

which related 3 Integers Condition for a Pythagorean Triple. And then, a humble please for an Divergent Media revealed by Ion Murgu Integers Powers Fundamental Equations.

$$\sum_{I=n}^0 (-1)^m * (K_{nI}) * (T + I)^n = n!$$

this define a Integer  $T$  and its Media Connections related to a power  $n$ .

### 9.2 Fermat-Murgu Theorem.

Based on Fermat-Murgu n Media and on Fermat-Murgu Impossible Equations we can postulate Now a future for **Fermat's Last Theorem** as Fermat-Murgu Theorem, but first to make an Observation.

- Fermat-Murgu n Media define a composite Media. Now Media

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here have a new conceptual face and maybe in time will be renamed.

- Fermat-Murgu Impossible Equations are for every  $n$  as number

$$\frac{n + 1}{2}$$

but to analyze all neighbors of  $T$  if  $T > n$  we can use also old form and can see all  $n$ 's neighbors are unbalanced related to Fermat's Last Theorem.

That mean, we have for every  $n$  Pure Fermat-Murgu Impossible Equations :

$$\frac{n + 1}{2}$$

and in a sense it contain a non perceptible form of another kind of EXCEPTIONS.

- For  $n=2$  , Fermat- Murgu Impossible Equations are valid and contain also validity for Pythagorean Triples (you can try it) into an apparently Exclusion Equations because are Exceptions which confirm the rule and denoted by simple TRUTH - As Syntax Power 2 have symmetry of multiply .
- Observing Ion Murgu Coefficients Triangle for  $n$  odd , the middle terms are the same.
- A Fermat-Murgu Quadruplets Analyze of

$$I^3(X^3 + Y^3 - Z^3) = -I^3$$

reveal with Clarity

$$X^3 + Y^3 + U^3 = Z^3$$

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where U also Integer.

Then can to Postulate as a future Fermat-Murgu Theorem

**For Every n as an Integer Power, a pure sum**

$$\sum_{1}^k X_i^n = Z^n$$

, can be validated into Integers only for,  $k=n$  for  
n odd and  $k=(n -1 )$  for n even.

### 9.3 P versus NP - Impossible.

Fermat-Murgu Theorem is Impossible to PROOF in his totality, and a simple acceptance will not exclude Infinity Loop on. Mathematically, we already proved it for  $n=2$  and  $n=3$ , and have any Calculus proofs for  $n=4$ , and  $n=5$ , but it is an Infinity small area of proofs for and  $n$  tending to  $\infty$  is excluding even an artificial intelligence for.

**Fermat-Murgu Theorem as an NP Problem PROOF  
Fermat's Last Theorem as P Problem Solved can't afford  
an NP Solution.  
P versus NP IMPOSSIBLE**

## 10 Importance

The importance for ION MURGU - INTEGERS POWERS FUNDAMENTAL EQUATIONS or as named in first place into 2015 September 24 is crucially, and I had more motivations to say it, right for I said, also can be named - HUMANITY SCIENCE THESAURUS - .

1. Can be used in Polynomial Equations to get multiple forms as help on.

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2. THOSE Equations solved instantly , Fermat's Last Theorem via a Mathematically Method, named Fermat-Murgu Impossible Equation what have at base it. I hope not a Mathematician with skill will put the problem of old convention of sign because for n odd if X and Y negatives , then Z forced Negative into Fermat Equations

$$X^n + Y^n = Z^n$$

, and for one negative by symmetry the Equation became

$$X^n = Y^n + Z^n$$

or

$$Y^n = X^n + Z^n$$

- a rotation of terms. The old sign convention can't stop Fermat-Murgu Impossible Equations in Solving Fermat's Last Theorem into an accurate mode. For  $(n < 0)$  , we are into Rational Field and Fermat's Last Theorem Extension or Murgu Extension is simple to demonstrate: Fermat's Last Theorem Extension Or Murgu Extension . If Fermat's Last Theorem via Fermat's Equations

$$X^n + Y^n = Z^n$$

have any solutions into Integers Field then by definition have also into Rational Field and INVERSE . DEMONSTRATION: Supposing By Absurd Fermat Equations

$$X^n + Y^n = Z^n$$

have any solutions into Integers , Then

$$\left( \frac{X^n}{Z^n} + \frac{Y^n}{Z^n} \right) = 1$$

will reveal a Rational Solution , and Inverse.

3. As you see Above via Ion Murgu God Equations Of Balance, we get a new tool in Numbers Theory and Algebra , and not only, via all connections possible which it brought, but also if we write left side as

$$(S_R^n)$$

where n, R are indices's for power and  $|R|$  ,any integer, then : image Fermat Equation

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(a)

$$\left| \frac{S_Z^n}{S_T^{n-1}} \right| = n$$

(b)

$$\left| \frac{S_Z^{n+1}}{S_R^n} \right| = (n + 1)$$

(c)

$$\left| \frac{S_R}{S(n-2)_T} \right| = n(n-1)$$

(d) and so on, and can include as T,Z,R and even n as Prime Numbers connected.

4. via those Equation , we get Fermat-Murgu QUADRUPLETS , maybe with the same importance as Pythagorean Triples into Integers- Fermat-Murgu QUADRUPLETS are Integers Coupled into Equations

$$(X^3 + Y^3 - Z^3 = 1)$$

or

$$(X^3 + Y^3 - Z^3 = -1)$$

and theirs Infinity Images

$$(J^3(X^3 + Y^3 - Z^3) = J^3)$$

or

$$(J^3(X^3 + Y^3 - Z^3) = -J^3)$$

with J covering all Integers .

5. Via Fermat-Murgu Impossible Equations and Euler - Murgu Equation 1=1, discovered Pythagorean Triples as Exceptions from Fermat's Last Theorem, but exceptions which confirm THE RULE.

6. Observation: The role of

**Ion Murgu Integers Powers Fundamental Equations)**

into solving **Fermat's Last Theorem** in an ACCURATE Mode via a NEW Mathematically Method

Fermat-Murgu Impossible Equations can't be excluded because of an also

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modern problem hidden in complex Numbers define, but not solved (I will say without to offend nobody),

**Double asymmetry of powers relative to UNITY, and sign convention around of ZERO.**

I do not have time right Now , to demonstrate • **Taniyama-Shimura Conjectre** • isn't proved yet, but as reflection I can sent you to **Fermat-Murgu Quadruplets** revealed by equations

$$X^3 + Y^3 - Z^3 = 1$$

or

$$X^3 + Y^3 - Z^3 = -1$$

which is the last concrete conjecture and by Definition a Complete Modular Method, then I consider impossible to Demonstrate this is valid for every n as power. Also I consider **semistable elliptical curves over rationals** an mistake in because Fermat Equations if have solutions into Integers, then, by Definition will have in rational , then can't

be used, even into an inverse logic. After power  $n > 3$  we can speak about multidimensional tensorial described until now into Fermat-Murgu n Media and maybe into near future , step by step, with another's connections. Then, with all respect, I will say , from  $n > 3$  , we can speak about elliptical curves on, begin from here we can speak about

Ion Murgu - Infinity Divergent Conjecture. As I demonstrated up in this material the sign convention neither can be invoked for the power of Ion Murgu Integers Powers Fundamental Equations as via its Mathematically Method Fermat-Murgu Impossible Equations in

**CERTIFY and SENT in fundamental Fermat's Last Theorem.**

7. Relative at Fermat Equations, Fermat-Murgu Quadruplets are first and single concrete Conjecture which can Define a Modular Method.
8. All those items, described in short terms here will be reloaded in its proper material, including four methods of certifying Fermat's Last Theorem and I hope I will can have a ISBN to put all in a BOOK, even if will be an electronic book, will need its proper ISBN.

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9. About Bibliography I think Abel Institution and International Math Institutions , and Nobel Institution will have the right to add The Bibliography which match whit. If any errors of Language or SIGNS, I claim the right to be coming with any ERRATA's in times.

In essence this is a result of a 40 years work, and not special for **Fermat's Last Theorem**, but for to say Blessing our Experimental and intuitive dependencies  $\frac{1}{R^2}$

**I am not excluding the possibility of any small errors, can be coming from the immensity of conceptual work, but in time I will return with a humble please for revisions, and if you see any please help on.** @ UNDER Human Natural Rights Of Copyright .