

## *Periodic Table of Physical Elements*

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### **ABSTRACT**

This is one of my original works in physics to present periodic table of physical elements which is invented with help of rule of *STC* , rule of *STV* and SI units system.

All of physical realities designated by physical units possess an common nature of space time structure that can be exclusively described by space time configuration (*STC*) and space time value (*STV*). Any physical reality bearing such kind of common nature is called as physical element , such as, space element, time element, mass element, energy element, momentum element, angular moment element, electric quantity element, magnetic moment element, temperature element, mol element and so on.

By *STC* and *STV*, all of physical elements known and unknown or unidentified have been counted statistically and summarized in form of tables entitled Periodic table of physical elements , abbreviated PTPE.

PTPE is consists of 13 tables, among which the 13<sup>th</sup> table is irregular coefficient ones, while other 12 tables are regular coefficient ones. For regular coefficient tables , each of them contains 36 physical elements , and each of 36 physical elements exhibits by its space time configuration , space time value , name of physical unit, its sign in physics and serial No. in PTPE.

More then 400 physical elements in total showcase in such way in this PTPE.

### **KEYWORDS**

Physical Element    Periodic Table of Physical Elements    Space Time Structure  
Space Time Configuration    Space Time Value    Dimensional Spaces    Dimensional Times

## TEXT

There are four sections in this paper, section one is about axiom of physics, section two is introduction to rule of space time configuration and rule of space time value, section three serves to periodic table of physical elements , section four briefly discusses ramification and role of the PTPE in development of physics.

Firstly to appoint a writing regarding physical quantities.

To express any physical quantity by  $A = |A| \dim A$ , and call  $|A|$  as modulus value of the physical quantity,  $\dim A$  as physical unit of the physical quantity.

### Section One

#### Axiom of Physics

For any physical reality designated by physical unit  $\dim A$ , there always exist an corresponding physical reality  $A_G$  whose space time value is constantly equal to 1.

$$\text{that is , } A_G = |A_G| \dim A \text{ and } STV(A_G) \equiv 1.$$

Axiom of physics is an abstracted result from principle of the great ultimate which is core of Taoism of Chinese religion. It is presumedly considered by the author as logic origin of whole theoretical system of physics.

### Section Two

#### Rule of *STC* and *STV*

Under axiom of physics, with help of SI units system, referred to Planck units system, descriptions in physics for space time structure of all physical realities can be obtained and identically expressed in manner of space time configuration and space time value of physical units which strictly follow rule of *STC* and rule of *STV*.

#### Rule of *STC*

For any physical reality designated by physical unit  $\dim A$ , expression of its space time structure identically abides by a logic format as

$$STC(\dim A) = Bm^a s^{-b}$$

where, *STC*( $\dim A$ ) said space time configuration of physical unit.

$m$  denotes an unit of one dimensional space or length unit.

$s$  denotes an unit of one dimensional time or time unit.

$$a, b = -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5.$$

$$B \text{ said coefficient and } B \geq |G| = 6.6745786383860966 \times 10^{-11}$$

Called this regulation the above as rule of space time configuration for physical units , abbreviated Rule of *STC*.

Interpretation to the Rule : All of physical ralityies possess space time structure which are composed of specific amounts of dimensional spaces, or dimensional times, or dimensional spaces and dimensional times combined.

Applicability of the Rule : Rule of *STC* is applicable to all branches of physics.

Examples of the *STC* :

- *STC* of time unit  $STC(s) = m^0 s^1$
- *STC* of length unit  $STC(m) = m^1 s^0$
- *STC* of mass unit  $STC(kg) = |G| m^3 s^{-2}$
- *STC* of mol unit  $STC(mol) = a m^2 s^{-1}$
- *STC* of electric current strength unit  $STC(A) = \sqrt{|G|} m^3 s^{-3}$
- *STC* of thermodynamic temperature unit

$$STC(K) = \frac{a^{-1}}{|N_A| \times 10^{-23}} m^4 s^{-4} \approx 22.7773 m^4 s^{-4}$$

$$\begin{array}{lll} STC(kgm^{-3}) = |G| m^0 s^{-2} & STC(ms^{-2}) = m^1 s^{-2} & STC(J) = |G| m^5 s^{-4} \\ STC(Nm^{-1}) = |G| m^3 s^{-4} & STC(W) = |G| m^5 s^{-5} & STC(Wm^{-2}Hz^{-1}) = |G| m^3 s^{-4} \\ STC(C) = \sqrt{|G|} m^3 s^{-2} & STC(V) = \sqrt{|G|} m^2 s^{-2} & STC(Am^{-2}) = \sqrt{|G|} m^1 s^{-3} \\ STC(kgm^2 s^{-1}) = |G| m^5 s^{-3} & STC(Wm^{-2}) = |G| m^3 s^{-5} & STC(kgms^{-1}) = |G| m^4 s^{-3} \\ STC(S) = m^1 s^{-1} & STC(\Omega) = m^{-1} s^1 & STC(Cm^{-3}) = \sqrt{|G|} m^0 s^{-2} \\ STC(H) = m^{-1} s^2 & STC(Vm^{-1}) = \sqrt{|G|} m^1 s^{-2} & STC(JT^{-1}) = \sqrt{|G|} m^5 s^{-3} \\ STC(Am^{-1}) = \sqrt{|G|} m^2 s^{-3} & STC(W_b) = \sqrt{|G|} m^2 s^{-1} & STC(T) = \sqrt{|G|} m^0 s^{-1} \end{array}$$

$$\text{where, } a = \frac{1}{137} \text{ (theoretical value)}$$

$$|N_A| = 6.0147595191367907 \times 10^{23} \text{ (theoretical value)}$$

$$|G| = 6.6745786383860966 \times 10^{-11} \text{ (theoretical value)}$$

$$\sqrt{|G|} = 0.8169809445994500 \times 10^{-5} \text{ (theoretical value)}$$

Regarding source for theoretical values, I am willing to give explanation inside another paper to be submitted at a time appropriate.

### Rule of *STV*

For any physical reality designated by physical units  $\dim A$ , its space time structure has numeric characteristics that can be exclusively expressed by space time value. The space time value identically stick to a logic format as

$$STV(\dim A) = STV(Bm^a s^{-b}) = B \times STV(m^a) \times STV(s^{-b})$$

where,  $STV(\dim A)$  said space time value of physical unit.

$$STV(m) = 2.4720661623652209 \times 10^{34}.$$

$$STV(s) = 0.7416198487095662 \times 10^{43}.$$

Called this regulation the above as rule of space time value for physical units, abbreviated Rule of *STV*.

Interpretation to the Rule : Space time value of physical units reflect numeric nature of physical realities, also are quantitative stipulation to physical quantities  $A_G$  and exclusive. Space time value means value in math, it has no zero value, no infinite value ether.

Applicability of the Rule : Rule of *STV* is applicable to all branches of physics.

Examples of *STV* (theoretical values):

- $STV(m) = 2.4720661623652209 \times 10^{34}$  and exclusive.

- $STV(s) = 0.7416198487095662 \times 10^{43}$  and exclusive.

$$STV(kg) = 1.8\dot{3} \times 10^7 \text{ and exclusive.}$$

$$STV(K) = 2.8120127152383534 \times 10^{-33} \text{ and exclusive.}$$

$$STV(A) = 0.3025855350368333 \times 10^{-30} \text{ and exclusive.}$$

$$STV(mol) = 6.0147595191367907 \times 10^{23} \text{ and exclusive.}$$

$$STV(J) = 2.\dot{0}\dot{3}\dot{7} \times 10^{-10} \text{ and exclusive.}$$

$$STV(N) = 0.8240220541217403 \times 10^{-44} \text{ and exclusive.}$$

$$STV(kgms^{-1}) = 0.06\dot{1} \times 10^0 \text{ and exclusive.}$$

$$STV(kgm^2s^{-1}) = 0.1510707099223190 \times 10^{34} \text{ and exclusive.}$$

$$STV(kgm^{-3}) = 0.1213559752433835 \times 10^{-95} \text{ and exclusive.}$$

$$STV(C) = 0.2243682799086353 \times 10^{13} \text{ and exclusive.}$$

$$STV(JT^{-1}) = 0.1849133825225098 \times 10^{39} \text{ and exclusive.}$$

$$STV(W_b) = 0.6732103161471585 \times 10^{21} \text{ and exclusive.}$$

$$STV(Am^{-1}) = 0.1224018756631197 \times 10^{-64} \text{ and exclusive.}$$

$$STV(W) = 0.2746740180405801 \times 10^{-52} \text{ and exclusive.}$$

### Section Three

#### Periodic Table of Physical Elements

All of physical realities designated by physical units or physical quantities possess a common nature of space time structure that can be exclusively expressed by space time configuration (*STC*) and space time value (*STV*). Any physical reality bearing such kind of common nature is called as physical element, such as space element, time element, mass element, energy element, momentum element, angular moment element, electric quantity element, magnetic moment element, temperature element and so on.

Periodic table of physical elements, abbreviated as PTPE, are made under rule of *STC* and rule of *STV* to list *STC* & *STV* expressions for all kinds of physical elements known and unknown alike.

There are two kinds of coefficient *B* in *STC*'s format, one kind is regular coefficient that is currently discovered as  $B = |G|$ ,  $B = \sqrt{|G|}$  and  $B = 1$ . Another kind is irregular ones that take specific values. Regular coefficient takes  $B = |G|$  and  $B = 1$  for physical units in mechanics and radiometry, takes  $B = \sqrt{|G|}$  and  $B = 1$  in electromagnetism, while irregular coefficient always shows up in *STC* format of most of physical units in both thermodynamics and statistical physics.

PTPE consists of 13 tables, among which the 13<sup>th</sup> table is irregular coefficient ones, while other 12 tables are regular coefficient ones. For regular coefficient tables, each of them contains 36 physical elements, and each of 36 physical elements exhibits by its space time configuration, space time value, name of physical unit, sign in physics and

serial No. in PTPE.

More than 400 physical elements in total are showcased in such way in PTPE.

The PTPE is fabricated along with changes in coefficient  $B$  and number of dimensions of dimensional spaces and dimensional times.

Some results shown in PTPE indicate that few space time structures may have double even multiple physical characteristics.

STC of Luminous intensity unit and its derived units have not been figured out yet by the author, so those physical elements related have not been identified in PTPE so far.

In the PTPE, there are large amounts of unknown physical elements marked by “Unidentified”, there are at least three situations for them. Firstly some of them are missed from the author, secondly some of them have existed in nature but not found by physics at present, thirdly some of them have not been created yet and will be gradually produced in the evolving process of the universe.

At present, numbers of known, new and unknown physical elements in the PTPE are

In PTPE- I, 14 elements known, 4 elements new, 18 elements unknown.

In PTPE- II, 2 elements known, 1 elements new, 33 elements unknown.

In PTPE-III, 1 elements known, 2 elements new, 33 elements unknown.

In PTPE-IV, 1 elements known, 1 elements new, 34 elements unknown.

In PTPE- V, 11 elements known, 0 elements new, 25 elements unknown.

In PTPE-VI, 3 elements known, 0 elements new, 33 elements unknown.

In PTPE-VII, 1 elements known, 0 elements new, 35 elements unknown.

In PTPE-VIII, 1 elements known, 0 elements new, 35 elements unknown.

In PTPE-IX, 10 elements known, 7 elements new, 19 elements unknown.

In PTPE- X, 2 elements known, 9 elements new, 25 elements unknown.

In PTPE- XI, 5 elements known, 6 elements new, 25 elements unknown.

In PTPE-XII, 6 elements known, 8 elements new, 22 elements unknown.

In PTPE- XIII 13 elements known, 1 elements new. Uncertain.

Color identification in PTPE are

**Orange-yellow:** value element

**Green :** Physical elements new

**Yellow:** Physical elements known

**Gray:** Physical elements unknown

**Blue:** Elementary elements (dimensional spaces and dimensional times)

1<sup>st</sup> Table of Physical Elements (PTPE- I )

( No.1 ~ No.36 )

$$a = 0,1,2,3,4,5 ; b = 0,1,2,3,4,5 ; B = |G|$$

$ G m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.1 $ G m^0 s^0$ 6.674578638 $\times 10^{-11}$ Value element $ G $	No.2 $ G m^1 s^0$ 1.64999999 $\times 10^{24}$ Natural entropy $S_n$	No.3 $ G m^2 s^0$ 4.07890966 $\times 10^{58}$ Unidentified	No.4 $ G m^3 s^0$ 1.0083333333 $\times 10^{93}$ Cosmic vacuum $V_a$	No.5 $ G m^4 s^0$ 2.49266671 $\times 10^{127}$ Unidentified	No.6 $ G m^5 s^0$ 6.16203703 $\times 10^{161}$ Unidentified
$S^{-1}$	No.7 $ G m^0 s^{-1}$ 8.99999999 $\times 10^{-54}$ Natural heat conductivity $\lambda_n$	No.8 $ G m^1 s^{-1}$ 2.22485954 $\times 10^{-21}$ Unidentified	No.9 $ G m^2 s^{-1}$ 5.49999999 $\times 10^{13}$ Unidentified	No.10 $ G m^3 s^{-1}$ 1.35963638 $\times 10^{48}$ Unidentified	No.11 $ G m^4 s^{-1}$ 3.36111111 $\times 10^{82}$ Unidentified	No.12 $ G m^5 s^{-1}$ 8.30886904 $\times 10^{116}$ Unidentified
$S^{-2}$	No.13 $ G m^0 s^{-2}$ 0.121355975 $\times 10^{-95}$ Mass density $kgm^{-3}$	No.14 $ G m^1 s^{-2}$ 2.99999999 $\times 10^{-62}$ Unidentified	No.15 $ G m^2 s^{-2}$ 7.41619848 $\times 10^{-28}$ Unidentified	No.16 $ G m^3 s^{-2}$ 1.83333333 $\times 10^7$ Mass $kg$	No.17 $ G m^4 s^{-2}$ 4.53212129 $\times 10^{41}$ Unidentified	No.18 $ G m^5 s^{-2}$ 1.12037037 $\times 10^{76}$ Unidentified
$S^{-3}$	No.19 $ G m^0 s^{-3}$ 1.636363636 $\times 10^{-139}$ Unidentified	No.20 $ G m^1 s^{-3}$ 4.0451991 $\times 10^{-105}$ Unidentified	No.21 $ G m^2 s^{-3}$ 9.99999999 $\times 10^{-71}$ Dynamic viscosity $kgm^{-1} s^{-1}$	No.22 $ G m^3 s^{-3}$ 2.47206616 $\times 10^{-36}$ Natural mol energy $E_{mn}$	No.23 $ G m^4 s^{-3}$ 0.0611111111 $\times 10^0$ Momentum $kgms^{-1}$	No.24 $ G m^5 s^{-3}$ 0.151070709 $\times 10^{34}$ Angular moment $kgm^2 s^{-1}$
$S^{-4}$	No.25 $ G m^0 s^{-4}$ 2.206472277 $\times 10^{-182}$ Unidentified	No.26 $ G m^1 s^{-4}$ 5.4545454 $\times 10^{-148}$ Unidentified	No.27 $ G m^2 s^{-4}$ 1.34839972 $\times 10^{-113}$ Pressure , Energy density $Nm^{-2}$	No.28 $ G m^3 s^{-4}$ 3.33333333 $\times 10^{-79}$ Surface tension $Nm^{-1}$	No.29 $ G m^4 s^{-4}$ 0.824022054 $\times 10^{-44}$ Force $N$	No.30 $ G m^5 s^{-4}$ 2.03703703 $\times 10^{-10}$ Energy $J$
$S^{-5}$	No.31 $ G m^0 s^{-5}$ 2.975206611 $\times 10^{-225}$ Unidentified	No.32 $ G m^1 s^{-5}$ 7.3549075 $\times 10^{-191}$ Unidentified	No.33 $ G m^2 s^{-5}$ 1.81818181 $\times 10^{-156}$ Radiant exitance $M_{e\lambda}$	No.34 $ G m^3 s^{-5}$ 4.4946657 $\times 10^{-122}$ Radiance $Wm^{-2}$	No.35 $ G m^4 s^{-5}$ 1.111111111 $\times 10^{-87}$ Spectral power $\Phi_{e\lambda}$	No.36 $ G m^5 s^{-5}$ 0.274674018 $\times 10^{-52}$ Power $W$

2<sup>nd</sup> Table of Physical Elements (PTPE-II)

(No.37 ~ No.72)

$$a = 0, -1, -2, -3, -4, -5 ; b = 0, 1, 2, 3, 4, 5 ; B = |G|$$

$ G m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.37 $ G m^0 s^0$ 6.674578638 $\times 10^{-11}$ Value element $ G $	No.38 $ G m^{-1} s^0$ 2.6999999999 $\times 10^{-45}$ Unidentified	No.39 $ G m^{-2} s^0$ 1.0922037771 $\times 10^{-79}$ Unidentified	No.40 $ G m^{-3} s^0$ 0.441818181 $\times 10^{-103}$ Unidentified	No.41 $ G m^{-4} s^0$ 0.178724254 $\times 10^{-137}$ Unidentified	No.42 $ G m^{-5} s^0$ 0.722975206 $\times 10^{-172}$ Unidentified
$S^{-1}$	No.43 $ G m^0 s^{-1}$ 8.999999999 $\times 10^{-54}$ Natural heat conductivity $\lambda_n$	No.44 $ G m^{-1} s^{-1}$ 3.6406792573 $\times 10^{-88}$ Unidentified	No.45 $ G m^{-2} s^{-1}$ 1.472727272 $\times 10^{-122}$ Unidentified	No.46 $ G m^{-3} s^{-1}$ 0.595747514 $\times 10^{-156}$ Unidentified	No.47 $ G m^{-4} s^{-1}$ 0.240991735 $\times 10^{-190}$ Unidentified	No.48 $ G m^{-5} s^{-1}$ 0.974859569 $\times 10^{-225}$ Unidentified
$S^{-2}$	No.49 $ G m^0 s^{-2}$ 0.1213559752 $\times 10^{-95}$ Mass density $kgm^3$	No.50 $ G m^{-1} s^{-2}$ 0.490909090 $\times 10^{-130}$ Unidentified	No.51 $ G m^{-2} s^{-2}$ 0.198582504 $\times 10^{-164}$ Unidentified	No.52 $ G m^{-3} s^{-2}$ 0.803305785 $\times 10^{-199}$ Unidentified	No.53 $ G m^{-4} s^{-2}$ 0.324953189 $\times 10^{-233}$ Unidentified	No.54 $ G m^{-5} s^{-2}$ 0.131450037 $\times 10^{-267}$ Unidentified
$S^{-3}$	No.55 $ G m^0 s^{-3}$ 1.6363636363 $\times 10^{-139}$ Unidentified	No.56 $ G m^{-1} s^{-3}$ 0.661941683 $\times 10^{-173}$ Unidentified	No.57 $ G m^{-2} s^{-3}$ 0.267768595 $\times 10^{-207}$ Unidentified	No.58 $ G m^{-3} s^{-3}$ 0.108317729 $\times 10^{-241}$ Unidentified	No.59 $ G m^{-4} s^{-3}$ 0.438166791 $\times 10^{-276}$ Unidentified	No.60 $ G m^{-5} s^{-3}$ 0.177247194 $\times 10^{-310}$ Unidentified
$S^{-4}$	No.61 $ G m^0 s^{-4}$ 2.2064722771 $\times 10^{-182}$ Unidentified	No.62 $ G m^{-1} s^{-4}$ 0.892561983 $\times 10^{-216}$ Unidentified	No.63 $ G m^{-2} s^{-4}$ 0.361059099 $\times 10^{-250}$ Unidentified	No.64 $ G m^{-3} s^{-4}$ 0.146055597 $\times 10^{-284}$ Unidentified	No.65 $ G m^{-4} s^{-4}$ 0.590823981 $\times 10^{-319}$ Unidentified	No.66 $ G m^{-5} s^{-4}$ 0.239000068 $\times 10^{-353}$ Unidentified
$S^{-5}$	No.67 $ G m^0 s^{-5}$ 2.9752066115 $\times 10^{-225}$ Unidentified	No.68 $ G m^{-1} s^{-5}$ 1.203530332 $\times 10^{-259}$ Unidentified	No.69 $ G m^{-2} s^{-5}$ 0.486851990 $\times 10^{-293}$ Unidentified	No.70 $ G m^{-3} s^{-5}$ 0.196941327 $\times 10^{-327}$ Unidentified	No.71 $ G m^{-4} s^{-5}$ 0.796666894 $\times 10^{-362}$ Unidentified	No.72 $ G m^{-5} s^{-5}$ 0.32226762 $\times 10^{-396}$ Unidentified



3<sup>rd</sup> Table of Physical Elements (PTPE-III)

( No.73 ~ No.108 )

$$a = 0,1,2,3,4,5 ; b = 0,-1,-2,-3,-4,-5 ; B = |G|$$

$ G m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.73 $ G m^0 s^0$ 6.674578638 $\times 10^{-11}$ Value element $ G $	No.74 $ G m^1 s^0$ 1.6499999999 $\times 10^{24}$ Natural entropy $S_n$	No.75 $ G m^2 s^0$ 4.07890966 $\times 10^{58}$ Unidentified	No.76 $ G m^3 s^0$ 1.0083333333 $\times 10^{93}$ Cosmic Vacuum $V_a$	No.77 $ G m^4 s^0$ 2.4926667137 $\times 10^{127}$ Unidentified	No.78 $ G m^5 s^0$ 6.1620370370 $\times 10^{161}$ Unidentified
$S^1$	No.79 $ G m^0 s^1$ 4..9499999999 $\times 10^{32}$ Unidentified	No.80 $ G m^1 s^1$ 2.0023735915 $\times 10^{66}$ Unidentified	No.81 $ G m^2 s^1$ 0.8099999999 $\times 10^{100}$ Unidentified	No.82 $ G m^3 s^1$ 0.327661133 $\times 10^{134}$ Unidentified	No.83 $ G m^4 s^1$ 0.1325454545 $\times 10^{168}$ Unidentified	No.84 $ G m^5 s^1$ 0.5361727633 $\times 10^{201}$ Unidentified
$S^2$	No.85 $ G m^0 s^2$ 3.6710182511 $\times 10^{75}$ Unidentified	No.86 $ G m^1 s^2$ 1.4849999999 $\times 10^{109}$ Unidentified	No.87 $ G m^2 s^2$ 0.6007120774 $\times 10^{143}$ Unidentified	No.88 $ G m^3 s^2$ 0.2429999999 $\times 10^{177}$ Unidentified	No.89 $ G m^4 s^2$ 0.9829833994 $\times 10^{210}$ Unidentified	No.90 $ G m^5 s^2$ 0.3976363636 $\times 10^{244}$ Unidentified
$S^3$	No.91 $ G m^0 s^3$ 2.7224999999 $\times 10^{118}$ Unidentified	No.92 $ G m^1 s^3$ 1.1013054753 $\times 10^{152}$ Unidentified	No.93 $ G m^2 s^3$ 0.4454999999 $\times 10^{186}$ Unidentified	No.94 $ G m^3 s^3$ 0.1802136232 $\times 10^{220}$ Unidentified	No.95 $ G m^4 s^3$ 0.7289999999 $\times 10^{253}$ Unidentified	No.96 $ G m^5 s^3$ 0.294895019 $\times 10^{287}$ Unidentified
$S^4$	No.97 $ G m^0 s^4$ 2.01906003311 $\times 10^{161}$ Unidentified	No.98 $ G m^1 s^4$ 0.8167499999 $\times 10^{195}$ Unidentified	No.99 $ G m^2 s^4$ 0.3303916426 $\times 10^{229}$ Unidentified	No.100 $ G m^3 s^4$ 0.1336499999 $\times 10^{263}$ Unidentified	No.101 $ G m^4 s^4$ 0.5406408697 $\times 10^{296}$ Unidentified	No.102 $ G m^5 s^4$ 0.2186999999 $\times 10^{330}$ Unidentified
$S^5$	No.103 $ G m^0 s^5$ 1.49737499999 $\times 10^{204}$ Unidentified	No.104 $ G m^1 s^5$ 0.6057180114 $\times 10^{238}$ Unidentified	No.105 $ G m^2 s^5$ 0.2450249999 $\times 10^{272}$ Unidentified	No.106 $ G m^3 s^5$ 0.9911749278 $\times 10^{305}$ Unidentified	No.107 $ G m^4 s^5$ 0.4009499999 $\times 10^{339}$ Unidentified	No.108 $ G m^5 s^5$ 0.1621922609 $\times 10^{373}$ Unidentified

4<sup>th</sup> Table of Physical Elements (PTPE-IV)

(No.109 ~ No.144)

$a = 0, -1, -2, -3, -4, -5$  ;  $b = 0, -1, -2, -3, -4, -5$  ;  $B = |G|$

$ G m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.109 $ G m^0 s^0$ 6.674578638 $\times 10^{-11}$ Value element $ G $	No.110 $ G m^{-1} s^0$ 2.6999999999 $\times 10^{-45}$ Unidentified	No.111 $ G m^{-2} s^0$ 1.0922037771 $\times 10^{-79}$ Unidentified	No.112 $ G m^{-3} s^0$ 0.441818181 $\times 10^{-103}$ Unidentified	No.113 $ G m^{-4} s^0$ 0.178724254 $\times 10^{-137}$ Unidentified	No.114 $ G m^{-5} s^0$ 0.722975206 $\times 10^{-172}$ Unidentified
$S^1$	No.115 $ G m^0 s^1$ 4..9499999999 $\times 10^{32}$ Unidentified	No.116 $ G m^{-1} s^1$ 2.0023735915 $\times 10^{-11}$ Natural mol entropy	No.117 $ G m^{-2} s^1$ 0.8099999999 $\times 10^{-45}$ Unidentified	No.118 $ G m^{-3} s^1$ 0.327661133 $\times 10^{-79}$ Unidentified	No.119 $ G m^{-4} s^1$ 0.132545454 $\times 10^{-113}$ Unidentified	No.120 $ G m^{-5} s^1$ 0.536172763 $\times 10^{-148}$ Unidentified
$S^2$	No.121 $ G m^0 s^2$ 3.6710182511 $\times 10^{75}$ Unidentified	No.122 $ G m^{-1} s^2$ 1.4849999999 $\times 10^{41}$ Unidentified	No.123 $ G m^{-2} s^2$ 0.6007120774 $\times 10^7$ Unidentified	No.124 $ G m^{-3} s^2$ 0.2429999999 $\times 10^{-27}$ Unidentified	No.125 $ G m^{-4} s^2$ 0.982983399 $\times 10^{-62}$ Unidentified	No.126 $ G m^{-5} s^2$ 0.397636363 $\times 10^{-96}$ Unidentified
$S^3$	No.127 $ G m^0 s^3$ 2.7224999999 $\times 10^{118}$ Unidentified	No.128 $ G m^{-1} s^3$ 1.1013054753 $\times 10^{84}$ Unidentified	No.129 $ G m^{-2} s^3$ 0.4454999999 $\times 10^{50}$ Unidentified	No.130 $ G m^{-3} s^3$ 0.1802136232 $\times 10^{16}$ Unidentified	No.131 $ G m^{-4} s^3$ 0.7289999999 $\times 10^{-19}$ Unidentified	No.132 $ G m^{-5} s^3$ 0.294895019 $\times 10^{-53}$ Unidentified
$S^4$	No.133 $ G m^0 s^4$ 2.01906003311 $\times 10^{161}$ Unidentified	No.134 $ G m^{-1} s^4$ 0.8167499999 $\times 10^{127}$ Unidentified	No.135 $ G m^{-2} s^4$ 0.3303916426 $\times 10^{93}$ Unidentified	No.136 $ G m^{-3} s^4$ 0.1336499999 $\times 10^{59}$ Unidentified	No.137 $ G m^{-4} s^4$ 0.5406408697 $\times 10^{24}$ Unidentified	No.138 $ G m^{-5} s^4$ 0.2186999999 $\times 10^{-10}$ Unidentified
$S^5$	No.139 $ G m^0 s^5$ 1.497374999999 $\times 10^{204}$ Unidentified	No.140 $ G m^{-1} s^5$ 0.6057180114 $\times 10^{170}$ Unidentified	No.141 $ G m^{-2} s^5$ 0.2450249999 $\times 10^{136}$ Unidentified	No.142 $ G m^{-3} s^5$ 0.9911749278 $\times 10^{101}$ Unidentified	No.143 $ G m^{-4} s^5$ 0.4009999999 $\times 10^{67}$ Unidentified	No.144 $ G m^{-5} s^5$ 0.1622124889 $\times 10^{33}$ Unidentified

5<sup>th</sup> Table of Physical Elements (PTPE-V)

(No.145 ~ No.180)

$$a = 0,1,2,3,4,5 ; b = 0,1,2,3,4,5 ; B = \sqrt{|G|}$$

$\sqrt{ G }m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.145 $\sqrt{ G }m^0 s^0$ 0.8169809445 $\times 10^{-5}$ Value element $\sqrt{ G }$	No.146 $\sqrt{ G }m^1 s^0$ 2.0196309484 $\times 10^{29}$ Unidentified	No.147 $\sqrt{ G }m^2 s^0$ 4.9926613281 $\times 10^{63}$ Unidentified	No.148 $\sqrt{ G }m^3 s^0$ 1.2342189129 $\times 10^{98}$ Unidentified	No.149 $\sqrt{ G }m^4 s^0$ 3.0510708116 $\times 10^{132}$ Unidentified	No.150 $\sqrt{ G }m^5 s^0$ 7.5424489123 $\times 10^{166}$ Unidentified
$S^{-1}$	No.151 $\sqrt{ G }m^0 s^{-1}$ 0.110161688096 $\times 10^{-47}$ Magnetic flux density $T$	No.152 $\sqrt{ G }m^1 s^{-1}$ 2.7232698153 $\times 10^{-14}$ Unidentified	No.153 $\sqrt{ G }m^2 s^{-1}$ 0.67321031614 $\times 10^{21}$ Magnetic flux $W_b$	No.154 $\sqrt{ G }m^3 s^{-1}$ 1.6642204427 $\times 10^{55}$ Unidentified	No.155 $\sqrt{ G }m^4 s^{-1}$ 4.1140630431 $\times 10^{89}$ Unidentified	No.156 $\sqrt{ G }m^5 s^{-1}$ 1.0170236038 $\times 10^{124}$ Unidentified
$S^{-2}$	No.157 $\sqrt{ G }m^0 s^{-2}$ 1.48541989927 $\times 10^{-91}$ Charge density $Cm^{-3}$	No.158 $\sqrt{ G }m^1 s^{-2}$ 0.3672056269 $\times 10^{-56}$ Strength of electric field $Vm^{-1}$	No.159 $\sqrt{ G }m^2 s^{-2}$ 0.90775660511 $\times 10^{-22}$ Voltage $V$	No.160 $\sqrt{ G }m^3 s^{-2}$ 0.22440343871 $\times 10^{13}$ Electric quantity $C$	No.161 $\sqrt{ G }m^4 s^{-2}$ 5.5474014756 $\times 10^{46}$ Unidentified	No.162 $\sqrt{ G }m^5 s^{-2}$ 1.3713543477 $\times 10^{81}$ Unidentified
$S^{-3}$	No.163 $\sqrt{ G }m^0 s^{-3}$ 2.0029397835 $\times 10^{-134}$ Unidentified	No.164 $\sqrt{ G }m^1 s^{-3}$ 4.951399664 $\times 10^{-100}$ Density of electric current $Am^{-2}$	No.165 $\sqrt{ G }m^2 s^{-3}$ 0.12240187566 $\times 10^{-64}$ Strength of magnetic field $Am^{-1}$	No.166 $\sqrt{ G }m^3 s^{-3}$ 0.30258553503 $\times 10^{-30}$ Strength of electric current $A$	No.167 $\sqrt{ G }m^4 s^{-3}$ 7.4801146238 $\times 10^3$ Unidentified	No.168 $\sqrt{ G }m^5 s^{-3}$ 0.18491338252 $\times 10^{39}$ Magnetic moment $JT^{-1}$
$S^{-4}$	No.169 $\sqrt{ G }m^0 s^{-4}$ 2.7007634532 $\times 10^{-177}$ Unidentified	No.170 $\sqrt{ G }m^1 s^{-4}$ 6.676465945 $\times 10^{-143}$ Unidentified	No.171 $\sqrt{ G }m^2 s^{-4}$ 1.650466554 $\times 10^{-108}$ Unidentified	No.172 $\sqrt{ G }m^3 s^{-4}$ 4.080062522 $\times 10^{-74}$ Unidentified	No.173 $\sqrt{ G }m^4 s^{-4}$ 1.008618450 $\times 10^{-39}$ Unidentified	No.174 $\sqrt{ G }m^5 s^{-4}$ 2.4933715412 $\times 10^{-5}$ Unidentified
$S^{-5}$	No.175 $\sqrt{ G }m^0 s^{-5}$ 3.6417086974 $\times 10^{-220}$ Unidentified	No.176 $\sqrt{ G }m^1 s^{-5}$ 9.002544844 $\times 10^{-186}$ Unidentified	No.177 $\sqrt{ G }m^2 s^{-5}$ 2.225488648 $\times 10^{-151}$ Unidentified	No.178 $\sqrt{ G }m^3 s^{-5}$ 5.501555182 $\times 10^{-117}$ Unidentified	No.179 $\sqrt{ G }m^4 s^{-5}$ 1.360020840 $\times 10^{-82}$ Unidentified	No.180 $\sqrt{ G }m^5 s^{-5}$ 3.362061500 $\times 10^{-48}$ Unidentified

6<sup>th</sup> Table of Physical Elements (PTPE-VI)

(No.181 ~ No.216)

$$a = 0, -1, -2, -3, -4, -5 ; b = 0, 1, 2, 3, 4, 5 ; B = \sqrt{|G|}$$

$\sqrt{ G }m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	<b>No.181</b> $\sqrt{ G }m^0 s^0$ 0.8169809445 $\times 10^{-5}$ Value element $\sqrt{ G }$	No.182 $\sqrt{ G }m^{-1} s^0$ 0.3304850642 $\times 10^{-39}$ Unidentified	No.183 $\sqrt{ G }m^{-2} s^0$ 0.1336877909 $\times 10^{-73}$ Unidentified	No.184 $\sqrt{ G }m^{-3} s^0$ 0.540793741 $\times 10^{-108}$ Unidentified	No.185 $\sqrt{ G }m^{-4} s^0$ 0.218761839 $\times 10^{-142}$ Unidentified	No.186 $\sqrt{ G }m^{-5} s^0$ 0.884935213 $\times 10^{-177}$ Unidentified
$S^{-1}$	<b>No.187</b> $\sqrt{ G }m^0 s^{-1}$ 0.110161688096 $\times 10^{-47}$ Magnetic flux density $T$	No.188 $\sqrt{ G }m^{-1} s^{-1}$ 0.4456259697 $\times 10^{-82}$ Unidentified	No.189 $\sqrt{ G }m^{-2} s^{-1}$ 0.180264580 $\times 10^{-116}$ Unidentified	No.190 $\sqrt{ G }m^{-3} s^{-1}$ 0.729206132 $\times 10^{-151}$ Unidentified	No.191 $\sqrt{ G }m^{-4} s^{-1}$ 0.294978404 $\times 10^{-185}$ Unidentified	No.192 $\sqrt{ G }m^{-5} s^{-1}$ 0.119324639 $\times 10^{-219}$ Unidentified
$S^{-2}$	<b>No.193</b> $\sqrt{ G }m^0 s^{-2}$ 1.48541989927 $\times 10^{-91}$ Charge density $Cm^{-3}$	No.194 $\sqrt{ G }m^{-1} s^{-2}$ 0.600881935 $\times 10^{-125}$ Unidentified	No.195 $\sqrt{ G }m^{-2} s^{-2}$ 0.243068710 $\times 10^{-159}$ Unidentified	No.196 $\sqrt{ G }m^{-3} s^{-2}$ 0.983261348 $\times 10^{-194}$ Unidentified	No.197 $\sqrt{ G }m^{-4} s^{-2}$ 0.397748799 $\times 10^{-228}$ Unidentified	No.198 $\sqrt{ G }m^{-5} s^{-2}$ 0.160897311 $\times 10^{-262}$ Unidentified
$S^{-3}$	No.199 $\sqrt{ G }m^0 s^{-3}$ 2.0029397835 $\times 10^{-134}$ Unidentified	No.200 $\sqrt{ G }m^{-1} s^{-3}$ 0.810229035 $\times 10^{-168}$ Unidentified	No.201 $\sqrt{ G }m^{-2} s^{-3}$ 0.327753782 $\times 10^{-202}$ Unidentified	No.202 $\sqrt{ G }m^{-3} s^{-3}$ 0.132582933 $\times 10^{-236}$ Unidentified	No.203 $\sqrt{ G }m^{-4} s^{-3}$ 0.536324371 $\times 10^{-271}$ Unidentified	No.204 $\sqrt{ G }m^{-5} s^{-3}$ 0.216953890 $\times 10^{-304}$ Unidentified
$S^{-4}$	No.205 $\sqrt{ G }m^0 s^{-4}$ 2.7007634532 $\times 10^{-177}$ Unidentified	No.206 $\sqrt{ G }m^{-1} s^{-4}$ 1.092512609 $\times 10^{-211}$ Unidentified	No.207 $\sqrt{ G }m^{-2} s^{-4}$ 0.441943110 $\times 10^{-245}$ Unidentified	No.208 $\sqrt{ G }m^{-3} s^{-4}$ 0.178774790 $\times 10^{-279}$ Unidentified	No.209 $\sqrt{ G }m^{-4} s^{-4}$ 0.723179635 $\times 10^{-314}$ Unidentified	No.210 $\sqrt{ G }m^{-5} s^{-4}$ 0.292540566 $\times 10^{-348}$ Unidentified
$S^{-5}$	No.211 $\sqrt{ G }m^0 s^{-5}$ 3.6417086974 $\times 10^{-220}$ Unidentified	No.212 $\sqrt{ G }m^{-1} s^{-5}$ 1.473143701 $\times 10^{-254}$ Unidentified	No.213 $\sqrt{ G }m^{-2} s^{-5}$ 0.595915968 $\times 10^{-288}$ Unidentified	No.214 $\sqrt{ G }m^{-3} s^{-5}$ 0.241059878 $\times 10^{-322}$ Unidentified	No.215 $\sqrt{ G }m^{-4} s^{-5}$ 0.975135221 $\times 10^{-357}$ Unidentified	No.216 $\sqrt{ G }m^{-5} s^{-5}$ 0.394461619 $\times 10^{-391}$ Unidentified

7<sup>th</sup> Table of Physical Elements (PTPE-VII) (No.217 ~ No.252)

$$a = 0,1,2,3,4,5; \quad b = 0,-1,-2,-3,-4,-5; \quad B = \sqrt{|G|}$$

$\sqrt{ G }m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	Na217 $\sqrt{ G }m^0 s^0$ 0.8169809445 $\times 10^{-5}$ Value element $\sqrt{ G }$	Na218 $\sqrt{ G }m^1 s^0$ 2.0196309484 $\times 10^{29}$ Unidentified	Na219 $\sqrt{ G }m^2 s^0$ 4.99266132810 $\times 10^{63}$ Unidentified	Na220 $\sqrt{ G }m^3 s^0$ 1.2342189129 $\times 10^{98}$ Unidentified	Na221 $\sqrt{ G }m^4 s^0$ 3.0510708116 $\times 10^{132}$ Unidentified	Na222 $\sqrt{ G }m^5 s^0$ 7.5424489123 $\times 10^{166}$ Unidentified
$S^1$	Na223 $\sqrt{ G }m^0 s^1$ 0.60588928453 $\times 10^{38}$ Unidentified	Na223 $\sqrt{ G }m^1 s^1$ 3.7026567388 $\times 10^{72}$ Unidentified	Na225 $\sqrt{ G }m^2 s^1$ 9.1532124348 $\times 10^{106}$ Unidentified	Na226 $\sqrt{ G }m^3 s^1$ 2.2627346737 $\times 10^{141}$ Unidentified	Na227 $\sqrt{ G }m^4 s^1$ 5.5936298213 $\times 10^{175}$ Unidentified	Na228 $\sqrt{ G }m^5 s^1$ 1.3827823006 $\times 10^{210}$ Unidentified
$S^2$	Na229 $\sqrt{ G }m^0 s^2$ 0.44933951952 $\times 10^{81}$ Unidentified	Na230 $\sqrt{ G }m^1 s^2$ 1.1107970216 $\times 10^{115}$ Unidentified	Na231 $\sqrt{ G }m^2 s^2$ 2.7459637304 $\times 10^{149}$ Unidentified	Na232 $\sqrt{ G }m^3 s^2$ 6.7882040211 $\times 10^{183}$ Unidentified	Na233 $\sqrt{ G }m^4 s^2$ 1.6780889463 $\times 10^{218}$ Unidentified	Na234 $\sqrt{ G }m^5 s^2$ 4.1483469018 $\times 10^{252}$ Unidentified
$S^3$	Na235 $\sqrt{ G }m^0 s^3$ 0.3332391064 $\times 10^{129}$ Unidentified	Na236 $\sqrt{ G }m^1 s^3$ 0.823789119 $\times 10^{163}$ Unidentified	Na237 $\sqrt{ G }m^2 s^{-3}$ 2.0364612063 $\times 10^{197}$ Unidentified	Na238 $\sqrt{ G }m^3 s^{-3}$ 5.0342668391 $\times 10^{231}$ Unidentified	Na239 $\sqrt{ G }m^4 s^{-3}$ 1.2445040705 $\times 10^{266}$ Unidentified	Na240 $\sqrt{ G }m^5 s^{-3}$ 3.0764964017 $\times 10^{300}$ Unidentified
$S^4$	Na241 $\sqrt{ G }m^0 s^4$ 0.24713673574 $\times 10^{172}$ Unidentified	Na242 $\sqrt{ G }m^1 s^4$ 0.610938361 $\times 10^{206}$ Unidentified	Na243 $\sqrt{ G }m^2 s^4$ 1.510280051 $\times 10^{240}$ Unidentified	Na244 $\sqrt{ G }m^3 s^4$ 3.733512211 $\times 10^{274}$ Unidentified	Na245 $\sqrt{ G }m^4 s^4$ 9.229489205 $\times 10^{308}$ Unidentified	Na246 $\sqrt{ G }m^5 s^4$ 2.2815907959 $\times 10^{343}$ Unidentified
$S^5$	Na247 $\sqrt{ G }m^0 s^5$ 0.1832815085 $\times 10^{215}$ Unidentified	Na248 $\sqrt{ G }m^1 s^5$ 0.453084015 $\times 10^{249}$ Unidentified	Na249 $\sqrt{ G }m^2 s^5$ 1.120053663 $\times 10^{283}$ Unidentified	Na250 $\sqrt{ G }m^3 s^5$ 2.768846761 $\times 10^{317}$ Unidentified	Na251 $\sqrt{ G }m^4 s^5$ 6.844772387 $\times 10^{351}$ Unidentified	Na252 $\sqrt{ G }m^5 s^5$ 1.692073020 $\times 10^{386}$ Unidentified

8<sup>th</sup> Table of Physical Elements (PTPE-VIII)

( No.253 ~ No.288 )

$$a = 0, -1, -2, -3, -4, -5 \quad ; \quad b = 0, -1, -2, -3, -4, -5 \quad ; \quad B = \sqrt{|G|}$$

$\sqrt{ G } m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.253 $\sqrt{ G } m^0 s^0$ 0.81698094459 $\times 10^{-5}$ Value element $\sqrt{ G }$	No.254 $\sqrt{ G } m^{-1} s^0$ 0.33048506429 $\times 10^{-39}$ Unidentified	No.255 $\sqrt{ G } m^{-2} s^0$ 0.1336877909 $\times 10^{-73}$ Unidentified	No.256 $\sqrt{ G } m^{-3} s^0$ 0.540793741 $\times 10^{-108}$ Unidentified	No.257 $\sqrt{ G } m^{-4} s^0$ 0.218761839 $\times 10^{-142}$ Unidentified	No.258 $\sqrt{ G } m^{-5} s^0$ 0.884935213 $\times 10^{-177}$ Unidentified
$S^1$	No.259 $\sqrt{ G } m^0 s^1$ 0.6058892845 $\times 10^{38}$ Unidentified	No.260 $\sqrt{ G } m^{-1} s^1$ 0.24509428337 $\times 10^4$ Unidentified	No.261 $\sqrt{ G } m^{-2} s^1$ 0.991455192 $\times 10^{-31}$ Unidentified	No.262 $\sqrt{ G } m^{-3} s^1$ 0.401063372 $10^{-65}$ Unidentified	No.263 $\sqrt{ G } m^{-4} s^1$ 0.162238122 $\times 10^{-99}$ Unidentified	No.264 $\sqrt{ G } m^{-5} s^1$ 0.656285519 $\times 10^{-134}$ Unidentified
$S^2$	No.265 $\sqrt{ G } m^0 s^2$ 0.4493395195 $\times 10^{81}$ Unidentified	No.266 $\sqrt{ G } m^{-1} s^2$ 0.1817667853 $\times 10^{47}$ Unidentified	No.267 $\sqrt{ G } m^{-2} s^2$ 0.735282850 $\times 10^{12}$ Unidentified	No.268 $\sqrt{ G } m^{-3} s^2$ 0.297436557 $\times 10^{-23}$ Unidentified	No.269 $\sqrt{ G } m^{-4} s^2$ 0.120319011 $\times 10^{-57}$ Unidentified	No.270 $\sqrt{ G } m^{-5} s^2$ 0.486714367 $\times 10^{-92}$ Unidentified
$S^3$	No.271 $\sqrt{ G } m^0 s^3$ 0.3332391064 $\times 10^{129}$ Unidentified	No.272 $\sqrt{ G } m^{-1} s^3$ 0.1348018558 $\times 10^{95}$ Unidentified	No.273 $\sqrt{ G } m^{-2} s^3$ 0.545300356 $\times 10^{60}$ Unidentified	No.274 $\sqrt{ G } m^{-3} s^3$ 0.220584855 $\times 10^{26}$ Unidentified	No.275 $\sqrt{ G } m^{-4} s^3$ 0.8923096735 $\times 10^{-9}$ Unidentified	No.276 $\sqrt{ G } m^{-5} s^3$ 0.360957035 $\times 10^{-43}$ Unidentified
$S^4$	No.277 $\sqrt{ G } m^0 s^4$ 0.247136735 $\times 10^{172}$ Unidentified	No.278 $\sqrt{ G } m^{-1} s^4$ 0.9997173194 $\times 10^{137}$ Unidentified	No.279 $\sqrt{ G } m^{-2} s^4$ 0.404405567 $\times 10^{104}$ Unidentified	No.280 $\sqrt{ G } m^{-3} s^4$ 0.163590106 $\times 10^{70}$ Unidentified	No.281 $\sqrt{ G } m^{-4} s^4$ 0.661754565 $\times 10^{35}$ Unidentified	No.282 $\sqrt{ G } m^{-5} s^4$ 0.267692902 $\times 10^1$ Unidentified
$S^5$	No.283 $\sqrt{ G } m^0 s^5$ 0.183281508 $\times 10^{215}$ Unidentified	No.284 $\sqrt{ G } m^{-1} s^5$ 0.7414102072 $\times 10^{180}$ Unidentified	No.285 $\sqrt{ G } m^{-2} s^5$ 0.299915195 $\times 10^{146}$ Unidentified	No.286 $\sqrt{ G } m^{-3} s^5$ 0.121321670 $\times 10^{112}$ Unidentified	No.287 $\sqrt{ G } m^{-4} s^5$ 0.490770320 $\times 10^{77}$ Unidentified	No.288 $\sqrt{ G } m^{-5} s^5$ 0.198526369 $\times 10^{43}$ Unidentified

9<sup>th</sup> Table of Physical Elements (PTPE-IX)

( No.289 ~ No.324 )

$$a = 0,1,2,3,4,5 ; b = 0,1,2,3,4,5 ; B = 1$$

$m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.289 $m^0 s^0$ 1.000000000 $\times 10^0$ Vaule element 1	No.290 $m^1 s^0$ 2.47206616 $\times 10^{34}$ Space of one dimension $m$	No.291 $m^2 s^0$ 6.11111111 $\times 10^{68}$ Space of two dimensions $m^2$	No.292 $m^3 s^0$ 1.5107070992 $\times 10^{103}$ Space of three dimensions $m^3$	No.293 $m^4 s^0$ 3.7345679012 $\times 10^{137}$ Space of four dimensions $m^4$	No.294 $m^5 s^0$ 9.2320989396 $\times 10^{171}$ Space of five dimensions $m^5$
$S^{-1}$	No.295 $m^0 s^{-1}$ 1.3483997249 $\times 10^{-43}$ Time of minus one dimension $s^{-1}$	No.296 $m^1 s^{-1}$ 0.3333333333 $\times 10^{-8}$ Velocity $ms^{-1}$	No.297 $m^2 s^{-1}$ 0.8240220541 $\times 10^{26}$ Kinematics viscosity $m^2 s^{-1}$	No.298 $m^3 s^{-1}$ 2.0370370370 $\times 10^{60}$ Flux $m^3 s^{-1}$	No.299 $m^4 s^{-1}$ 5.0356903307 $\times 10^{94}$ Unidentified	No.300 $m^5 s^{-1}$ 1.2448559670 $\times 10^{129}$ Unidentified
$S^{-2}$	No.301 $m^0 s^{-2}$ 1.81818181818 $\times 10^{-86}$ Time of minus two dimensions $s^{-2}$	No.302 $m^1 s^{-2}$ 0.44946657497 $\times 10^{-51}$ Acceleration $ms^{-2}$	No.303 $m^2 s^{-2}$ 1.1111111111 $\times 10^{-17}$ Specific energy $Jkg^{-1}$	No.304 $m^3 s^{-2}$ 2.7467401804 $\times 10^{17}$ Unidentified	No.305 $m^4 s^{-2}$ 6.7901234567 $\times 10^{51}$ Unidentified	No.306 $m^5 s^{-2}$ 1.6785634435 $\times 10^{86}$ Unidentified
$S^{-3}$	No.307 $m^0 s^{-3}$ 2.4516358635 $\times 10^{-129}$ Time of minus three dimensions $s^{-3}$	No.308 $m^1 s^{-3}$ 6.0606060606 $\times 10^{-95}$ Unidentified	No.309 $m^2 s^{-3}$ 1.4982219165 $\times 10^{-60}$ Absorb dose $Gy \cdot s^{-1}$	No.310 $m^3 s^{-3}$ 3.703703703 $\times 10^{-26}$ Unidentified	No.311 $m^4 s^{-3}$ 9.1558006013 $\times 10^8$ Unidentified	No.312 $m^5 s^{-3}$ 2.2633744855 $\times 10^{43}$ Unidentified
$S^{-4}$	No.313 $m^0 s^{-4}$ 3.3057851239 $\times 10^{-172}$ Time of minus four dimensions $s^{-4}$	No.314 $m^1 s^{-4}$ 8.172119545 $\times 10^{-138}$ Unidentified	No.315 $m^2 s^{-4}$ 2.020202020 $\times 10^{-103}$ Unidentified	No.316 $m^3 s^{-4}$ 4.994073055 $\times 10^{-69}$ Unidentified	No.317 $m^4 s^{-4}$ 1.234567901 $\times 10^{-34}$ Unidentified	No.318 $m^5 s^{-4}$ 3.0519335337 $\times 10^0$ Unidentified
$S^{-5}$	No.319 $m^0 s^{-5}$ 4.4575197518 $\times 10^{-215}$ Time of minus five dimensions $s^{-5}$	No.320 $m^1 s^{-5}$ 1.10192837 $\times 10^{-180}$ Unidentified	No.321 $m^2 s^{-5}$ 2.724039848 $\times 10^{-146}$ Unidentified	No.322 $m^3 s^{-5}$ 6.73400673 $\times 10^{-112}$ Unidentified	No.323 $m^4 s^{-5}$ 1.417484402 $\times 10^{-77}$ Unidentified	No.324 $m^5 s^{-5}$ 3.504115226 $\times 10^{-44}$ Unidentified

**10<sup>th</sup> Table of Physical Elements (PTPE-X)** ( No.325 ~ No.360 )

$a = 0, -1, -2, -3, -4, -5$  ;  $b = 0, 1, 2, 3, 4, 5$  ;  $B = 1$

$m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.325 $m^0 s^0$ 1.000000000 $\times 10^0$ Value element 1	No.326 $m^{-1} s^0$ 0.40451991 $\times 10^{-34}$ Space of minus one dimension $m^{-1}$	No.327 $m^{-2} s^0$ 0.1636363636 $\times 10^{-68}$ Space of minus two dimensions $m^{-2}$	No.328 $m^{-3} s^0$ 0.661941683 $\times 10^{-103}$ Space of minus three dimensions $m^{-3}$	No.329 $m^{-4} s^0$ 0.267768595 $\times 10^{-137}$ Space of minus four dimensions $m^{-4}$	No.330 $m^{-5} s^0$ 0.108317729 $\times 10^{-171}$ Space of minus five dimensions $m^{-5}$
$S^{-1}$	No.331 $m^0 s^{-1}$ 1.3483997249 $\times 10^{-43}$ Frequency Hz	No.332 $m^{-1} s^{-1}$ 0.5454545454 $\times 10^{-77}$ Unidentified	No.333 $m^{-2} s^{-1}$ 0.220647227 $\times 10^{-111}$ Unidentified	No.334 $m^{-3} s^{-1}$ 0.892561983 $\times 10^{-146}$ Unidentified	No.335 $m^{-4} s^{-1}$ 0.361059099 $\times 10^{-180}$ Unidentified	No.336 $m^{-5} s^{-1}$ 0.146055597 $\times 10^{-214}$ Unidentified
$S^{-2}$	No.337 $m^0 s^{-2}$ 1.8181818181 $\times 10^{-86}$ Time of minus two dimensions $s^{-2}$	No.338 $m^{-1} s^{-2}$ 0.735490759 $\times 10^{-120}$ Unidentified	No.339 $m^{-2} s^{-2}$ 0.297520661 $\times 10^{-154}$ Unidentified	No.340 $m^{-3} s^{-2}$ 0.120353033 $\times 10^{-188}$ Unidentified	No.341 $m^{-4} s^{-2}$ 0.486851990 $\times 10^{-223}$ Unidentified	No.342 $m^{-5} s^{-2}$ 0.196941327 $\times 10^{-257}$ Unidentified
$S^{-3}$	No.343 $m^0 s^{-3}$ 2.4516358635 $\times 10^{-129}$ Time of minus three dimensions $s^{-3}$	No.344 $m^{-1} s^{-3}$ 0.991735537 $\times 10^{-163}$ Unidentified	No.345 $m^{-2} s^{-3}$ 0.401176777 $\times 10^{-197}$ Unidentified	No.346 $m^{-3} s^{-3}$ 0.162283996 $\times 10^{-231}$ Unidentified	No.347 $m^{-4} s^{-3}$ 0.656471090 $\times 10^{-266}$ Unidentified	No.348 $m^{-5} s^{-3}$ 0.265555631 $\times 10^{-300}$ Unidentified
$S^{-4}$	No.349 $m^0 s^{-4}$ 3.3057851239 $\times 10^{-172}$ Time of minus four dimensions $s^{-4}$	No.350 $m^{-1} s^{-4}$ 1.337255925 $\times 10^{-206}$ Unidentified	No.351 $m^{-2} s^{-4}$ 0.540946656 $\times 10^{-240}$ Unidentified	No.352 $m^{-3} s^{-4}$ 0.218823696 $\times 10^{-274}$ Unidentified	No.353 $m^{-4} s^{-4}$ 0.885185438 $\times 10^{-309}$ Unidentified	No.354 $m^{-5} s^{-4}$ 0.358075140 $\times 10^{-343}$ Unidentified
$S^{-5}$	No.355 $m^0 s^{-5}$ 4.4575197518 $\times 10^{-215}$ Time of minus five dimensions $s^{-5}$	No.356 $m^{-1} s^{-5}$ 1.803155522 $\times 10^{-249}$ Unidentified	No.357 $m^{-2} s^{-5}$ 0.729412323 $\times 10^{-283}$ Unidentified	No.358 $m^{-3} s^{-5}$ 0.295061812 $\times 10^{-317}$ Unidentified	No.359 $m^{-4} s^{-5}$ 0.119358380 $\times 10^{-351}$ Unidentified	No.360 $m^{-5} s^{-5}$ 0.482828420 $\times 10^{-386}$ Unidentified



11<sup>th</sup> Table of Physical Elements (PTPE-XI) (No.361 ~ No.396)

$a = 0,1,2,3,4,5$  ;  $b = 0,-1,-2,-3,-4,-5$  ;  $B = 1$

$m^a s^{-b}$	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.361 $m^0 s^0$ 1.000000000 $\times 10^0$ Value element 1	No.362 $m^1 s^0$ 2.47206616 $\times 10^{34}$ Capacitance $F$	No.363 $m^2 s^0$ 6.11111111 $\times 10^{68}$ Space of two dimensions $m^2$	No.364 $m^3 s^0$ 1.5107070992 $\times 10^{103}$ Space of three dimensions $m^3$	No.365 $m^4 s^0$ 3.7345679012 $\times 10^{137}$ Space of four dimensions $m^4$	No.366 $m^5 s^0$ 9.2320989396 $\times 10^{171}$ Space of five dimensions $m^5$
$S^1$	No.367 $m^0 s^1$ 0.741619848709 $\times 10^{43}$ Time of one dimension $s^1$	No.368 $m^1 s^1$ 1.8333333333 $\times 10^{77}$ Unidentified	No.369 $m^2 s^1$ 4.5321212976 $\times 10^{111}$ Unidentified	No.370 $m^3 s^1$ 1.1203703703 $\times 10^{146}$ Unidentified	No.371 $m^4 s^1$ 2.7696296819 $\times 10^{180}$ Unidentified	No.372 $m^5 s^1$ 6.8467078189 $\times 10^{214}$ Unidentified
$S^2$	No.373 $m^0 s^2$ 0.550000000000 $\times 10^{86}$ Time of two dimensions $s^2$	No.374 $m^1 s^2$ 1.3596363893 $\times 10^{120}$ Unidentified	No.375 $m^2 s^2$ 3.3611111111 $\times 10^{154}$ Unidentified	No.376 $m^3 s^2$ 8.3088890457 $\times 10^{188}$ Unidentified	No.377 $m^4 s^2$ 2.0540123456 $\times 10^{223}$ Unidentified	No.378 $m^5 s^2$ 5.077654416 $\times 10^{257}$ Unidentified
$S^3$	No.379 $m^0 s^3$ 0.40789091679 $\times 10^{129}$ Time of three dimensions $s^3$	No.380 $m^1 s^3$ 1.0083333333 $\times 10^{163}$ Unidentified	No.381 $m^2 s^3$ 2.4926667137 $\times 10^{197}$ Unidentified	No.382 $m^3 s^3$ 6.1620370370 $\times 10^{231}$ Unidentified	No.383 $m^4 s^3$ 1.5232963250 $\times 10^{266}$ Unidentified	No.384 $m^5 s^3$ 3.765689300 $\times 10^{300}$ Unidentified
$S^4$	No.385 $m^0 s^4$ 0.30249999999 $\times 10^{172}$ Time of four dimensions $s^4$	No.386 $m^1 s^4$ 0.7478000141 $\times 10^{206}$ Unidentified	No.387 $m^2 s^4$ 1.8486111111 $\times 10^{240}$ Unidentified	No.388 $m^3 s^4$ 4.5698889751 $\times 10^{274}$ Unidentified	No.389 $m^4 s^4$ 1.1297067901 $\times 10^{309}$ Unidentified	No.390 $m^5 s^4$ 2.7927099292 $\times 10^{343}$ Unidentified
$S^5$	No.391 $m^0 s^5$ 0.22434000423 $\times 10^{215}$ Time of five dimensions $s^5$	No.392 $m^1 s^5$ 0.5545833333 $\times 10^{249}$ Unidentified	No.393 $m^2 s^5$ 1.3709666925 $\times 10^{283}$ Unidentified	No.394 $m^3 s^5$ 3.3891203703 $\times 10^{317}$ Unidentified	No.395 $m^4 s^5$ 8.3781297877 $\times 10^{351}$ Unidentified	No.396 $m^5 s^5$ 2.0711291152 $\times 10^{386}$ Unidentified

12<sup>th</sup> Table of Physical Elements (PTPE-XII) (No.397 ~ No.432)

$a = 0, -1, -2, -3, -4, -5$  ;  $b = 0, -1, -2, -3, -4, -5$  ;  $B = 1$

$m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.397 $m^0 s^0$ 1.000000000 $\times 10^0$ Value element 1	No.398 $m^{-1} s^0$ 0.40451991 $\times 10^{-34}$ Number of waves $\lambda^{-1}$	No.399 $m^{-2} s^0$ 0.1636363636 $\times 10^{-68}$ Space of mimus two dimensions $m^{-2}$	No.400 $m^{-3} s^0$ .066194168 $\times 10^{-103}$ Space of mimus three imensions $m^{-3}$	No.401 $m^{-4} s^0$ 0.267768595 $\times 10^{-137}$ Space of mimus four dimensions $m^{-4}$	No.402 $m^{-5} s^0$ 0.108317729 $\times 10^{-171}$ Space of mimus five dimensions $m^{-5}$
$S^1$	No.403 $m^0 s^1$ 0.74161984870 $\times 10^{43}$ Time of one dimension $s$	No.404 $m^{-1} s^1$ 2.999999999 $\times 10^8$ Electric resistance $\Omega$	No.405 $m^{-2} s^1$ 1.2135597524 $\times 10^{-26}$ Unidentified	No.406 $m^{-3} s^1$ 0.490909090 $\times 10^{-60}$ Unidentified	No.407 $m^{-4} s^1$ 0.198582504 $\times 10^{-94}$ Unidentified	No.408 $m^{-5} s^1$ 0.803305785 $\times 10^{-129}$ Unidentified
$S^2$	No.409 $m^0 s^2$ 0.55000000000 $0 \times 10^{86}$ Time of two dimensions $s^2$	No.410 $m^{-1} s^2$ 0.2224859546 $\times 10^{52}$ Inductance $H$	No.411 $m^{-2} s^2$ 8.999999999 $\times 10^{16}$ Permeability $m^{-2} s^2$	No.412 $m^{-3} s^2$ 3.640679257 $\times 10^{-18}$ Unidentified	No.413 $m^{-4} s^2$ 1.472727272 $\times 10^{-52}$ Unidentified	No.414 $m^{-5} s^2$ 0.595747514 $\times 10^{-86}$ Unidentified
$S^3$	No.415 $m^0 s^3$ 0.40789091679 $\times 10^{129}$ Time of three dimensions $s^3$	No.416 $m^{-1} s^3$ 1.649999999 $\times 10^{94}$ Unidentified	No.417 $m^{-2} s^3$ 0.66745786383 $\times 10^{60}$ Unidentified	No.418 $m^{-3} s^3$ 0.269999999 $\times 10^{26}$ Unidentified	No.419 $m^{-4} s^3$ 0.109220377 $\times 10^{-8}$ Unidentified	No.420 $m^{-5} s^3$ 0.441818181 $\times 10^{-43}$ Unidentified
$S^4$	No.421 $m^0 s^4$ 0.3024999999 $\times 10^{172}$ Time of four dimensions $s^4$	No.422 $m^{-1} s^4$ 0.1223672750 $\times 10^{138}$ Unidentified	No.423 $m^{-2} s^4$ 0.494999999 $\times 10^{103}$ Unidentified	No.424 $m^{-3} s^4$ 0.2002373591 $\times 10^{69}$ Unidentified	No.425 $m^{-4} s^4$ 0.809999999 $\times 10^{34}$ Unidentified	No.426 $m^{-5} s^4$ 0.3276611331 $\times 10^0$ Unidentified
$S^5$	No.427 $m^0 s^5$ 0.22434000423 $\times 10^{215}$ Time of five dimensns $s^5$	No.428 $m^{-1} s^5$ 0.907499999 $\times 10^{180}$ Unidentified	No.429 $m^{-2} s^5$ 0.3671018251 $\times 10^{146}$ Unidentified	No.430 $m^{-3} s^5$ 0.148499999 $\times 10^{112}$ Unidentified	No.431 $m^{-4} s^5$ 0.6007120774 $\times 10^{77}$ Unidentified	No.432 $m^{-5} s^5$ 0.242999999 $\times 10^{43}$ Unidentified

**13<sup>th</sup> Table of Physical Elements (PTPE- XIII)**

 (  $N_{0.133} \sim N_{0.168}$  )

 $a = 0, \pm 1, \pm 2, \pm 3, \pm 4, \pm 5$        $b = 0, \pm 1, \pm 2, \pm 3, \pm 4, \pm 5$ 

$ G  m^a s^{-b}$	$m^0$	$m^{\pm 1}$	$m^{\pm 2}$	$m^{\pm 3}$	$m^{\pm 4}$	$m^{\pm 5}$
$S^0$	No.433 $Bm^0 s^0$ Value element $B \geq  G $	No.434 – 1 $\frac{ N_A  \times 10^{23}}{a^1}  G  m^1 s^0$ 0.724405343545 $\times 10^{23}$ Entropy $S$ No.434 – 2 $a^{-1} m$ 1.80442785574 $\times 10^{32}$ mol conductivity $kg^{-1} mol^{-1} s^3 A^2$	No.435 $Bm^{\pm 2} s^0$ $STV(Bm^{\pm 2} s^0)$ Unidentified	No.436 $Bm^{\pm 3} s^0$ $STV(Bm^{\pm 3} s^0)$ Unidentified	No.437 $Bm^{\pm 4} s^0$ $STV(Bm^{\pm 4} s^0)$ Unidentified	No.438 $Bm^{\pm 5} s^0$ $STV(Bm^{\pm 5} s^0)$ Unidentified
$S^{\pm 1}$	No.439 – 1 $\frac{ N_A  \times 10^{23}}{a^1}  G  m^0 s^{-1}$ 0.395130187388 $\times 10^{-54}$ Heat conductivity $Wm^{-1} K^{-1}$ No.439 – 2 $m^0 s^{-1}$ 1.3483997249 $\times 10^{-43}$ Radioactivity $Bq$	No.440 – 1 $ N_A  \times 10^{23}  G  m^1 s^1$ 1.204379562043 $\times 10^{-1}$ mol entropy $JK^{-1} mol^{-1}$ No.440 – 2 $a^{-1} m^1 s^1$ 2.511666666666 $\times 10^{79}$ mol volume $m^3 mol^{-1}$ No.440 – 3 $am^{-1} s^{-1}$ 0.398142003981 $\times 10^{-79}$ mol density $mol \cdot m^{-3}$	No.441 $am^2 s^{-1}$ 6.01475951913 $\times 10^{23}$ $mol$	No.442 $Bm^{\pm 3} s^{\pm 1}$ $STV(Bm^{\pm 3} s^{\pm 1})$ Unidentified	No.443 $Bm^{\pm 4} s^{\pm 1}$ $STV(Bm^{\pm 4} s^{\pm 1})$ Unidentified	No.444 $Bm^{\pm 5} s^{\pm 1}$ $STV(Bm^{\pm 5} s^{\pm 1})$ Unidentified
$S^{\pm 2}$	No.445 – 1 $ M_G  s_{i,i-1}^{-2}$ 0.99173553 $\times 10^{-93}$ Unit information No.445 – 2 $ G ^{-1} s^2$ 0.824022054121 $\times 10^{96}$	No.446 $Bm^{\pm 1} s^{\pm 2}$ $STV(Bm^{\pm 1} s^{\pm 2})$ Unidentified	No.447 $a N_A  \times 10^{23} m^{\pm 2} s^2$ 0.3951301873 $\times 10^{16}$ Specific entropy $kg^{-1} K^{-1} J$	No.448 $Bm^{\pm 3} s^{\pm 2}$ $STV(Bm^{\pm 3} s^{\pm 2})$ Unidentified	No.449 $Bm^{\pm 4} s^{\pm 2}$ $STV(Bm^{\pm 4} s^{\pm 2})$ Unidentified	No.450 $Bm^{\pm 5} s^{\pm 2}$ $STV(Bm^{\pm 5} s^{\pm 2})$ Unidentified

	Specific volume $m^3 kg^{-1}$					
$S^{\pm 3}$	No.451 $Bm^0 s^{\pm 3}$ $STV(Bm^0 s^{\pm 3})$ Unidentified	No.452 $Bm^{\pm 1} s^{\pm 3}$ $STV(Bm^{\pm 1} s^{\pm 3})$ Unidentified	No.453 $Bm^{\pm 2} s^{\pm 3}$ $STV(Bm^{\pm 2} s^{\pm 3})$ Unidentified	No.454 $a^{-1}  G  m^3 s^{-3}$ 3.38673064244 $\times 10^{-34}$ Mol energy $J \cdot mol^{-1}$	No.455 $Bm^{\pm 4} s^{\pm 3}$ $STV(Bm^{\pm 4} s^{\pm 3})$ Unidentified	No.456 $Bm^{\pm 5} s^{\pm 3}$ $STV(Bm^{\pm 5} s^{\pm 3})$ Unidentified
$S^{\pm 4}$	No.457 $Bm^0 s^{\pm 4}$ $STV(Bm^0 s^{\pm 4})$ Unidentified	No.458 $Bm^{\pm 1} s^{\pm 4}$ $STV(Bm^{\pm 1} s^{\pm 4})$ Unidentified	No.459 $Bm^{\pm 2} s^{\pm 4}$ $STV(Bm^{\pm 2} s^{\pm 4})$ Unidentified	No.460 $Bm^{\pm 3} s^{\pm 4}$ $STV(Bm^{\pm 3} s^{\pm 4})$ Unidentified	No.461 $\frac{a^{-1}}{ N_A  \times 10^{-23}} m^4 s^{-4}$ 2.812012715238 $\times 10^{-33}$ Thermodynamic temperature $K$	No.462 $Bm^{\pm 5} s^{\pm 4}$ $STV(Bm^{\pm 5} s^{\pm 4})$ Unidentified
$S^{\pm 5}$	No.463 $Bm^0 s^{\pm 6}$ $STV(Bm^0 s^{\pm 6})$ Unidentified	No.464 $Bm^{\pm 1} s^{\pm 5}$ $STV(Bm^{\pm 1} s^{\pm 5})$ Unidentified	No.465 $Bm^{\pm 2} s^{\pm 5}$ $STV(Bm^{\pm 2} s^{\pm 5})$ Unidentified	No.466 $Bm^{\pm 3} s^{\pm 5}$ $STV(Bm^{\pm 3} s^{\pm 5})$ Unidentified	No.467 $Bm^{\pm 4} s^{\pm 5}$ $STV(Bm^{\pm 4} s^{\pm 5})$ Unidentified	No.468 $Bm^{\pm 5} s^{\pm 5}$ $STV(Bm^{\pm 5} s^{\pm 5})$ Unidentified

## Section Four

### Ramification and Role in Physics of PTPE

PTPE can make us get outlook in general over all of physical elements existed and to exist in nature, provides a new way so convenient to comb relations of physical elements in between, and is much helpful for us to discover new physical elements and new relations among physical elements as well. All in all, PTPE serves as a guideline for people to fully get acknowledge about physical elements and relations in between.

Roles PTPE played in physics at least give expression to following aspects.

#### 1, Be conductive to discover new physical elements by similarity in STC

For instance, No.16 element  $|G| m^3 s^{-2}$  and No.160 element  $\sqrt{|G|} m^3 s^{-2}$  are same in term of dimensional spaces and dimensional times, difference in between is only coefficient, these two elements have similarity in STC. While mass element and electric quantity element has similar role in mechanics and eletromagnetics respectively.

Another example, No.24 element  $|G| m^5 s^{-3}$  and No.168 element  $\sqrt{|G|} m^5 s^{-3}$  are same in term of dimensional spaces and dimensional times, difference in between is only coefficient, these two elements have similarity in STC. While angular moment element

and magnetic moment element has similar role in mechanics and eletromagnetics respectively.

So we can make use of such kind of similarity in STC to comprehend and speculate over unknown elements, therefore to discover new physical elements in this way.

For instance, by physical meaning of No.30 element of energy  $|G|m^5s^{-4}$ , we can speculate that of No.174 unknown element  $\sqrt{|G|m^5s^{-4}}$  in eletromagnetics.

Another example, by physical meaning of No.159 element of voltage  $\sqrt{|G|m^2s^{-2}}$ , we can speculate that of No.15 unknown element  $|G|m^2s^{-2}$  in mechanics or in radiometry.

**2, Be much easier to make clear about relations between physical elements known**

For instance , by some of contents in 1<sup>st</sup> and 5<sup>th</sup> table of physical elements as below,

<p>No.23  <math> G m^4s^{-3}</math>                      0.0611111111  <math>\times 10^{-0}</math>                      Momentum  <math>kgms^{-1}</math></p>	<p>No.24  <math> G m^5s^{-3}</math>                      0.151070709  <math>\times 10^{34}</math>                      Angular moment  <math>kgm^2s^{-1}</math></p>	<p>No.158  <math>\sqrt{ G m^1s^{-2}}</math>                      0.36720562698  <math>\times 10^{-56}</math>                      Strength of electric field  <math>Vm^{-1}</math></p>	<p>No.159  <math>\sqrt{ G m^2s^{-2}}</math>                      0.90775660511  <math>\times 10^{-22}</math>                      Voltage  <math>V</math></p>	<p>No.160  <math>\sqrt{ G m^3s^{-2}}</math>                      0.22440343871  <math>\times 10^{13}</math>                      Electric quantity  <math>C</math></p>
<p>No.29  <math> G m^4s^{-4}</math>                      0.824022054  <math>\times 10^{-44}</math>                      Force  <math>N</math></p>	<p>No.30  <math> G m^5s^{-4}</math>                      2.03703703  <math>\times 10^{-10}</math>                      Energy  <math>J</math></p>	<p>No.164  <math>\sqrt{ G m^1s^{-3}}</math>                      4.951399664  <math>\times 10^{-100}</math>                      Density of electric current  <math>Am^{-2}</math></p>	<p>No.165  <math>\sqrt{ G m^2s^{-3}}</math>                      0.12240187566  <math>\times 10^{-64}</math>                      Strength of magnetic field  <math>Am^{-1}</math></p>	<p>No.166  <math>\sqrt{ G m^3s^{-3}}</math>                      0.30258553503  <math>\times 10^{-30}</math>                      Strength of electric current  <math>A</math></p>
<p>No.35  <math> G m^4s^{-5}</math>                      1.111111111  <math>\times 10^{-87}</math>                      Spectral power  <math>\Phi_{e\lambda}</math></p>	<p>No.36  <math> G m^5s^{-5}</math>                      0.274674018  <math>\times 10^{-52}</math>                      Power  <math>W</math></p>			

and by knowledge in physics related , it is well known that No.23 element of energy interacts with one dimensional space to produces No.24 element of angular moment. Time rage of No.30 element of energy produces No.30 element of power . Time rage of No.24 element of momentum produces No.36 element of energy. Time rage of No.160 element of electric quantity produces No.166 element of electric current strength.

So it is much easier to make clear about relations for some physical elements known,

such as , Time rage of No.158 element of electric field strength produces No.164 element of density of electric current. Time rage of No.159 element of voltage produces No.165 element of magnetic field strength.

### 3, Be helpful to comprehend over unknown elements

For instance , by following content of 5<sup>th</sup> table of physical elements ,

<p><i>No.164</i>  <math>\sqrt{ G m^1s^{-3}}</math>                      4.951399664  <math>\times 10^{-100}</math>                      Density of electric current  <math>Am^{-2}</math></p>	<p><i>No.165</i>  <math>\sqrt{ G m^2s^{-3}}</math>                      0.12240187566  <math>\times 10^{-64}</math>                      Strength of magnetic field  <math>Am^{-1}</math></p>	<p><i>No.166</i>  <math>\sqrt{ G m^3s^{-3}}</math>                      0.30258553503  <math>\times 10^{-30}</math>                      Strength of electric current  <math>A</math></p>	<p><i>No.167</i>  <math>\sqrt{ G m^4s^{-3}}</math>                      7.4801146238  <math>\times 10^3</math>                      Unidentified</p>	<p><i>No.168</i>  <math>\sqrt{ G m^5s^{-3}}</math>                      0.18491338252  <math>\times 10^{39}</math>                      Magnetic moment  <math>JT^{-1}</math></p>
<p><i>No.170</i>  <math>\sqrt{ G m^1s^{-4}}</math>                      6.676465945  <math>\times 10^{-143}</math>                      Unidentified</p>	<p><i>No.171</i>  <math>\sqrt{ G m^2s^{-4}}</math>                      1.650466554  <math>\times 10^{-108}</math>                      Unidentified</p>	<p><i>No.172</i>  <math>\sqrt{ G m^3s^{-4}}</math>                      4.080062522  <math>\times 10^{-74}</math>                      Unidentified</p>	<p><i>No.173</i>  <math>\sqrt{ G m^4s^{-4}}</math>                      1.008618450  <math>\times 10^{-39}</math>                      Unidentified</p>	<p><i>No.174</i>  <math>\sqrt{ G m^5s^{-4}}</math>                      2.4933715412  <math>\times 10^{-5}</math>                      Unidentified</p>

We can speculate that

Time rate of No.164 density of electric current produces No.170 unknown element.

Time rate of No.165 strength of magnetic field produces No.171 unknown element.

Time rate of No.166 electric current strength produces No.172 unknown element.

Time rate of No.168 magnetic moment element produces No.174 unknown element.

### 4, Speculation to physical interaction of No.362 physical element

No.362 element situated in 11<sup>th</sup> table has double characteristics with same STC , one is physically represents an unit of one dimensional space, another physically represents an unit of capacitance,

1.000000000	<p><i>No.362</i>  <math>m^1s^0</math>                      2.47206616  <math>\times 10^{34}</math>                      Capacitance  <math>F</math></p>	6.11111111	1.5107070992	3.7345679012	9.2320989396
Value element		Space of two dimensions	Space of three dimensions	Space of four dimensions	Space of five dimensions

By this nature of No.362 element, we can speculate about nature of some physical elements unknown . For instance, by following contents in 5<sup>th</sup> table of physical elements,

<p><b>No.151</b>  <math>\sqrt{ G }m^0s^{-1}</math>                      0.110161688096  <math>\times 10^{-47}</math>                      Magnetic induction  <i>T</i></p>	<p><b>No.152</b>  <math>\sqrt{ G }m^1s^{-1}</math>                      2.7232698153  <math>\times 10^{-14}</math>                      Unidentified</p>	<p><b>No.153</b>  <math>\sqrt{ G }m^2s^{-1}</math>                      0.67321031614  <math>\times 10^{21}</math>                      Magnetic flux  <i>W<sub>b</sub></i></p>	<p><b>No.154</b>  <math>\sqrt{ G }m^3s^{-1}</math>                      1.6642204427  <math>\times 10^{55}</math>                      Unidentified</p>	<p>4.1140630431                      Unidentified</p>	<p>1.0170236038                      Unidentified</p>
<p><b>No.157</b>  <math>\sqrt{ G }m^0s^{-2}</math>                      1.48541989927  <math>\times 10^{-91}</math>                      Charge density  <i>Cm<sup>-3</sup></i></p>	<p><b>No.158</b>  <math>\sqrt{ G }m^1s^{-2}</math>                      0.3672056269  <math>\times 10^{-56}</math>                      Strength of electric field  <i>Vm<sup>-1</sup></i></p>	<p><b>No.159</b>  <math>\sqrt{ G }m^2s^{-2}</math>                      0.90775660511  <math>\times 10^{-22}</math>                      Voltage  <i>V</i></p>	<p><b>No.160</b>  <math>\sqrt{ G }m^3s^{-2}</math>                      0.22440343871  <math>\times 10^{13}</math>                      Electric quantity  <i>C</i></p>	<p><b>No.161</b>  <math>\sqrt{ G }m^4s^{-2}</math>                      5.5474014756  <math>\times 10^{46}</math>                      Unidentified</p>	<p>1.3713543477                      Unidentified</p>

it is reasonable to speculate that No.362 element of capacitance interacts with No.151 element of magnetic inductance to produce No.152 element unknown. No.362 element of capacitance interacts with No.153 element of magnetic flux to produce No.154 element unknown. No.362 element of capacitance interacts with No.160 element of electric quantity to produce No.161 element unknown.

Such kind of speculation can justify if following relationship can be verified by physics, No.362 element of capacitance interacts with No.157 element of charge density also to produce No.158 element of electric field strength. No.362 element interacts with No.158 element of electric field strength also to produce No.159 element of voltage. No.362 element interacts with No.159 element of voltage also to produce No.159 element of electric quantity.

## APPENDIX Definition of Dimensional Spaces and Dimensional Times

### Definition of Dimensional Spaces

To define physical elements denoted by  $m^a$  as  $a$  dimensional spaces, and call  $a$  as number of dimensions of  $a$  dimensional spaces.  $m$  said unit of length,  $a = 1,2,3,4,5$ .

Meaning in physics: Dimensional spaces are elementary elements to compose all of other physical elements together with dimensional times.

### Definition of Dimensional Times

To define physical elements denoted by  $s^b$  as  $b$  dimensional spaces, and call  $b$  as number of dimensions of  $b$  dimensional times.  $s$  said unit of time,  $b = 1,2,3,4,5$ .

Meaning in physics: Dimensional times are elementary elements to compose all of other physical elements together with dimensional spaces.

## REFERENCE

Directionary of Physics , Longdao Xu , Beijing , 2004,5 , Science Press