

## Periodic Table of Physical Elements

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### ABSTRACT

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

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 rule of *STC* and rule of *STV*, all of physical elements known and unknown 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 SI units and serial *No.* in PTPE.

More then 400 physical elements in total showcase in such way in 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 physical quantity by  $A = |A| \dim A$  , where  $|A|$  called as modulus value of physical quantity,  $\dim A$  as physical unit of physical quantity.

### 1, 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. 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.

### 2, Rule of *STC* and *STV*

Under axiom of physics, with help of SI units[1], referred to Planck units[2], descriptions 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 an expression as

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

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;

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

$B$  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 ralities 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 : applicable to all branches of physics.

### Examples of 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  $STC(mol) = am^2 s^{-1}$
- STC of electric current strength unit  $STC(A) = \sqrt{|G|} m^3 s^{-3}$
- STC of thermodynamic temperature unit

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

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

where,  $a = \frac{1}{137}$  ;  $|N_A| = 6.0147595191367907 \times 10^{23}$  ;

$|G| = 6.6745786383860966 \times 10^{-11}$  ;  $\sqrt{|G|} = 0.8169809445994500 \times 10^{-5}$

### 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 an expression 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 : 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.
- $STV(kg) = 1.8\dot{3} \times 10^7$  and exclusive.
- $STV(K) = 2.8120127152383534 \times 10^{-33}$  and exclusive.
- $STV(A) = 0.3025855350368333 \times 10^{-30}$  and exclusive.
- $STV(mol) = 6.0147595191367907 \times 10^{23}$  and exclusive.
- $STV(J) = 2.0\dot{3}7 \times 10^{-10}$  and exclusive.
- $STV(N) = 0.8240220541217403 \times 10^{-44}$  and exclusive.
- $STV(kgms^{-1}) = 0.06\dot{1} \times 10^0$  and exclusive.
- $STV(kgm^2s^{-1}) = 0.1510707099223190 \times 10^{34}$  and exclusive.
- $STV(kgm^{-3}) = 0.1213559752433835 \times 10^{-95}$  and exclusive.
- $STV(C) = 0.2243682799086353 \times 10^{13}$  and exclusive.
- $STV(JT^{-1}) = 0.1849133825225098 \times 10^{39}$  and exclusive.
- $STV(W_b) = 0.6732103161471585 \times 10^{21}$  and exclusive.
- $STV(Am^{-1}) = 0.1224018756631197 \times 10^{-64}$  and exclusive.

### 3, Periodic Table of Physical Elements

All of physical realities designated by physical units possess an 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 know and unknown alike.

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

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, sign in physics and serial *No.* in PTPE.

More then 400 physical elements in total are showcased 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.

*No.4* element and *No.455-1* element are non-substantiated existences, respectively representing cosmic vacuum and unit information, only these two elements can not be explained about their meaning by interpretation of rule of *STC*, despite expressions of theirs also follow the rule of *STC* and *STV*. Cosmic vacuum is something totally different from vacuum, while unit information means all of information the universe possesses at any universal moment ( $10^{-43} s$  about).

Cosmic vacuum an unit information has something to do directly with evolutionary process of the universe. Regarding these two kind of non-substantiated existences ,the author will expound in another presentation.

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 created yet and will be gradually produced in evolving process of the universe.

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:

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

$ G  m^a s^{-b}$						
$a = 0,1,2,3,4,5 ; b = 0,1,2,3,4,5 ; B =  G $						
	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$s^0$	<b>No.1</b> $ G  m^0 s^0$ 6.674573 $\times 10^{-11}$ Value element	<b>No.2</b> $S_n$ $ G  m^1 s^0$ 1.6499999 $\times 10^{-24}$ Natural entropy	<b>No.3</b> $ G  m^2 s^0$ 4.078909 $\times 10^{58}$ Unidentified	<b>No.4</b> $V_a$ $ G  m^3 s^0$ 1.0083333 $\times 10^{93}$ Cosmic vacuum	<b>No.5</b> $ G  m^4 s^0$ 2.492666 $\times 10^{127}$ Unidentified	<b>No.6</b> $ G  m^5 s^0$ 6.162037 $\times 10^{161}$ Unidentified
$s^{-1}$	<b>No.7</b> $ G  m^0 s^{-1}$ 8.999999 $\times 10^{-54}$ N.heat conductivity $\lambda_n$	<b>No.8</b> $ G  m^1 s^{-1}$ 2.224859 $\times 10^{-19}$ Unidentified	<b>No.9</b> $ G  m^2 s^{-1}$ 5.499999 $\times 10^{15}$ Unidentified	<b>No.10</b> $ G  m^3 s^{-1}$ 1.359636 $\times 10^{50}$ Unidentified	<b>No.11</b> $ G  m^4 s^{-1}$ 3.361111 $\times 10^{84}$ Unidentified	<b>No.12</b> $ G  m^5 s^{-1}$ 8.308869 $\times 10^{118}$ Unidentified
$s^{-2}$	<b>No.13</b> $kgm^3$ $ G  m^0 s^{-2}$ 0.1213559 $\times 10^{-95}$ Mass density	<b>No.14</b> $ G  m^1 s^{-2}$ 2.999999 $\times 10^{-62}$ Unidentified	<b>No.15</b> $ G  m^2 s^{-2}$ 7.416198 $\times 10^{-28}$ Unidentified	<b>No.16</b> $kg$ $ G  m^3 s^{-2}$ 1.833333 $\times 10^7$ Mass	<b>No.17</b> $ G  m^4 s^{-2}$ 4.532121 $\times 10^{41}$ Unidentified	<b>No.18</b> $ G  m^5 s^{-2}$ 1.120370 $\times 10^{76}$ Unidentified
$s^{-3}$	<b>No.19</b> $ G  m^0 s^{-3}$ 1.63636363 $\times 10^{-139}$ Unidentified	<b>No.20</b> $ G  m^1 s^{-3}$ 4.0451991 $\times 10^{-105}$ Unidentified	<b>No.21</b> $ G  m^2 s^{-3}$ 9.9999999 $\times 10^{-71}$ Dyn. viscosity $kgm^{-1}s^{-1}$	<b>No.22</b> $ G  m^3 s^{-3}$ 2.4720661 $\times 10^{-36}$ N. mol energy $E_{mn}$	<b>No.23</b> $ G  m^4 s^{-3}$ 0.06111111 $\times 10^0$ Momentum $kgms^{-1}$	<b>No.24</b> $ G  m^5 s^{-3}$ 0.1510707 $\times 10^{34}$ Angular moment $kgm^2s^{-1}$
$s^{-4}$	<b>No.25</b> $ G  m^0 s^{-4}$ 2.20647227 $\times 10^{-182}$ Unidentified	<b>No.26</b> $ G  m^1 s^{-4}$ 5.4545454 $\times 10^{-148}$ Unidentified	<b>No.27</b> $ G  m^2 s^{-4}$ 1.34839972 $\times 10^{-113}$ Pressure, $Nm^{-2}$	<b>No.28</b> $ G  m^3 s^{-4}$ 3.3333333 $\times 10^{-79}$ Surface tension $Nm^{-1}$	<b>No.29</b> $ G  m^4 s^{-4}$ 0.8240220 $\times 10^{-44}$ Force $N$	<b>No.30</b> $ G  m^5 s^{-4}$ 2.0370370 $\times 10^{-10}$ Energy $J$
$s^{-5}$	<b>No.31</b> $ G  m^0 s^{-5}$ 2.975206611 $\times 10^{-225}$ Unidentified	<b>No.32</b> $ G  m^1 s^{-5}$ 7.3549075 $\times 10^{-191}$ Unidentified	<b>No.33</b> $ G  m^2 s^{-5}$ 1.81818181 $\times 10^{-156}$ Exitance $M_{e\lambda}$	<b>No.34</b> $ G  m^3 s^{-5}$ 4.4946657 $\times 10^{-122}$ Radiance $Wm^{-2}$	<b>No.35</b> $ G  m^4 s^{-5}$ 1.111111111 $\times 10^{-87}$ Special power $\Phi_{e\lambda}$	<b>No.36</b> $ 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

$ G m^a s^{-b}$	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	<b>No.37</b> $ G m^0 s^0$ 6.67457863 $\times 10^{-11}$ Value element $ G $	No.38 $ G m^{-1} s^0$ 2.69999999 $\times 10^{-45}$ Unidentified	No.39 $ G m^{-2} s^0$ 1.09220377 $\times 10^{-79}$ Unidentified	No.40 $ G m^{-3} s^0$ 0.44181818 $\times 10^{-113}$ Unidentified	No.41 $ G m^{-4} s^0$ 0.17872425 $\times 10^{-147}$ Unidentified	No.42 $ G m^{-5} s^0$ 0.72297520 $\times 10^{-182}$ Unidentified
$S^{-1}$	<b>No.43</b> $ G m^0 s^{-1}$ 8.99999999 $\times 10^{-54}$ Natural heat conductivity $\lambda_n$	No.44 $ G m^{-1} s^{-1}$ 3.64067925 $\times 10^{-88}$ Unidentified	No.45 $ G m^{-2} s^{-1}$ 1.47272727 $\times 10^{-122}$ Unidentified	No.46 $ G m^{-3} s^{-1}$ 0.59574751 $\times 10^{-156}$ Unidentified	No.47 $ G m^{-4} s^{-1}$ 0.24099173 $\times 10^{-190}$ Unidentified	No.48 $ G m^{-5} s^{-1}$ 0.97485956 $\times 10^{-225}$ Unidentified
$S^{-2}$	<b>No.49</b> $ G m^0 s^{-2}$ 0.12135597 $\times 10^{-95}$ Mass density $kgm^{-3}$	No.50 $ G m^{-1} s^{-2}$ 0.49090909 $\times 10^{-130}$ Unidentified	No.51 $ G m^{-2} s^{-2}$ 0.19858250 $\times 10^{-164}$ Unidentified	No.52 $ G m^{-3} s^{-2}$ 0.80330578 $\times 10^{-199}$ Unidentified	No.53 $ G m^{-4} s^{-2}$ 0.32495318 $\times 10^{-233}$ Unidentified	No.54 $ G m^{-5} s^{-2}$ 0.13145003 $\times 10^{-267}$ Unidentified
$S^{-3}$	No.55 $ G m^0 s^{-3}$ 1.63636363 $\times 10^{-139}$ Unidentified	No.56 $ G m^{-1} s^{-3}$ 0.66194168 $\times 10^{-173}$ Unidentified	No.57 $ G m^{-2} s^{-3}$ 0.26776859 $\times 10^{-207}$ Unidentified	No.58 $ G m^{-3} s^{-3}$ 0.10831772 $\times 10^{-241}$ Unidentified	No.59 $ G m^{-4} s^{-3}$ 0.43816679 $\times 10^{-276}$ Unidentified	No.60 $ G m^{-5} s^{-3}$ 0.17724719 $\times 10^{-310}$ Unidentified
$S^{-4}$	No.61 $ G m^0 s^{-4}$ 2.20647227 $\times 10^{-182}$ Unidentified	No.62 $ G m^{-1} s^{-4}$ 0.89256198 $\times 10^{-216}$ Unidentified	No.63 $ G m^{-2} s^{-4}$ 0.36105909 $\times 10^{-250}$ Unidentified	No.64 $ G m^{-3} s^{-4}$ 0.14605559 $\times 10^{-284}$ Unidentified	No.65 $ G m^{-4} s^{-4}$ 0.59082398 $\times 10^{-319}$ Unidentified	No.66 $ G m^{-5} s^{-4}$ 0.23900006 $\times 10^{-353}$ Unidentified
$S^{-5}$	No.67 $ G m^0 s^{-5}$ 2.97520661 $\times 10^{-225}$ Unidentified	No.68 $ G m^{-1} s^{-5}$ 1.20353033 $\times 10^{-259}$ Unidentified	No.69 $ G m^{-2} s^{-5}$ 0.48685199 $\times 10^{-293}$ Unidentified	No.70 $ G m^{-3} s^{-5}$ 0.19694132 $\times 10^{-327}$ Unidentified	No.71 $ G m^{-4} s^{-5}$ 0.79666689 $\times 10^{-362}$ Unidentified	No.72 $ G m^{-5} s^{-5}$ 0.3222676 $\times 10^{-396}$ Unidentified



3<sup>rd</sup> Table of Physical Elements PTPE-III No.73 ~ No.108

$ G m^a s^{-b}$ $a = 0,1,2,3,4,5$ ; $b = 0,-1,-2,-3,-4,-5$ ; $B =  G $						
	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.73 $ G m^0 s^0$ 6.674578 $\times 10^{-11}$ 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$ 2.49266671 $\times 10^{127}$ 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$ 0.13254545 $\times 10^{168}$ 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$ 0.60071207 $\times 10^{143}$ Unidentified	No.88 $ G m^3 s^2$ 0.2429999999 $\times 10^{177}$ Unidentified	No.89 $ G m^4 s^2$ 0.98298339 $\times 10^{210}$ 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$ 2.0190600331 $\times 10^{161}$ Unidentified	No.98 $ G m^1 s^4$ 0.8167499999 $\times 10^{195}$ Unidentified	No.99 $ G m^2 s^4$ 0.33039164 $\times 10^{229}$ Unidentified	No.100 $ G m^3 s^4$ 0.1336499999 $\times 10^{263}$ Unidentified	No.101 $ G m^4 s^4$ 0.54064086 $\times 10^{296}$ Unidentified	No.102 $ G m^5 s^4$ 0.2186999999 $\times 10^{330}$ Unidentified
$S^5$	No.103 $ G m^0 s^5$ 1.4973749999 $\times 10^{204}$ 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**

$ 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 $\times 10^{-113}$ Unidentified	No.113 $ G m^{-4} s^0$ 0.178724254 $\times 10^{-147}$ Unidentified	No.114 $ G m^{-5} s^0$ 0.722975206 $\times 10^{-182}$ 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 $\times 10^{-2}$ Natural mol entropy	No.117 $ G m^{-2} s^1$ 0.8099999999 $\times 10^{-36}$ Unidentified	No.118 $ G m^{-3} s^1$ 0.327661133 $\times 10^{-70}$ Unidentified	No.119 $ G m^{-4} s^1$ 0.132545454 $\times 10^{-104}$ Unidentified	No.120 $ G m^{-5} s^1$ 0.536172763 $\times 10^{-138}$ 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$ 0.242999999 $\times 10^{-27}$ 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$ 0.728999999 $\times 10^{-19}$ Unidentified	No.132 $ G m^{-5} s^3$ 0.294895019 $\times 10^{-53}$ Unidentified
$S^4$	No.133 $ G m^0 s^4$ 2.0190600331 $\times 10^{161}$ 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$ 1.4973749999 $\times 10^{204}$ 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-A** No.145 ~ No.180

$\sqrt{ G } m^a s^{-b}$ $a = 0,1,2,3,4,5$ ; $b = 0,1,2,3,4,5$ ; $B = \sqrt{ G }$						
	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	<b>No.145</b> $\sqrt{ G } m^0 s^0$ 0.8169809445 $\times 10^{-5}$ Value element	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
$S^{-1}$	<b>No.151</b> $\sqrt{ G } m^0 s^{-1}$ 0.1101616880 $\times 10^{-47}$ Magnetic flux density $T$	No.152 $\sqrt{ G } m^1 s^{-1}$ 2.7232698153 $\times 10^{-14}$ Unidentified	<b>No.153</b> $\sqrt{ G } m^2 s^{-1}$ 0.6732103161 $\times 10^{21}$ 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
$S^{-2}$	<b>No.157</b> $\sqrt{ G } m^0 s^{-2}$ 1.4854198992 $\times 10^{-91}$ Charge density $Cm^{-3}$	No.158 $\sqrt{ G } m^1 s^{-2}$ 0.3672056269 $\times 10^{-56}$ Elec.field trength $Vm^{-1}$	No.159 $\sqrt{ G } m^2 s^{-2}$ 0.9077566051 $\times 10^{-22}$ Voltage $V$	<b>No.160</b> $\sqrt{ G } m^3 s^{-2}$ 0.2244034387 $\times 10^{13}$ Electric quantity $C$	No.161 $\sqrt{ G } m^4 s^{-2}$ 0.5547401475 $\times 10^{47}$ 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	<b>No.164</b> $\sqrt{ G } m^1 s^{-3}$ 4.951399664 $\times 10^{-100}$ Density of electric current $Am^{-2}$	No.165 $\sqrt{ G } m^2 s^{-3}$ 0.1224018756 $\times 10^{-64}$ Strength of magnetic field $Am^{-1}$	<b>No.166</b> $\sqrt{ G } m^3 s^{-3}$ 0.3025855350 $\times 10^{-30}$ Electric current strength $A$	No.167 $\sqrt{ G } m^4 s^{-3}$ 7.4801146238 $\times 10^3$ Unidentified	<b>No.168</b> $\sqrt{ G } m^5 s^{-3}$ 0.1849133825 $\times 10^{39}$ 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 $\sqrt{ G } m^4 s^{-4}$ 1.00861845 $\times 10^{-39}$ 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 $\sqrt{ G } m^4 s^{-5}$ 1.36002084 $\times 10^{-82}$ 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

$\sqrt{ G m^a s^{-b}}$ $a = 0, -1, -2, -3, -4, -5$ ; $b = 0, 1, 2, 3, 4, 5$ ; $B = \sqrt{ G }$						
	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	<b>No.181</b> $\sqrt{ G m^0 s^0}$ 0.8169809445 $\times 10^{-5}$ Value element	No.182 $\sqrt{ G m^{-1} s^0}$ 0.3304850642 $\times 10^{-39}$ Unidentified	No.183 $\sqrt{ G m^{-2} s^0}$ 0.133687790 $\times 10^{-73}$ 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 $\sqrt{ G m^{-5} s^0}$ 0.88493521 $\times 10^{-177}$ Unidentified
$S^{-1}$	<b>No.187 T</b> $\sqrt{ G m^0 s^{-1}}$ 0.11016168809 $\times 10^{-47}$ Magnetic flux density	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 $\times 10^{-305}$ 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 $\sqrt{ G m^{-5} s^{-4}}$ 0.29254056 $\times 10^{-348}$ 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

$$\sqrt{|G|} m^a s^{-b}$$

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

	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	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 $\sqrt{ G } m^2 s^0$ 4.9926613281 $\times 10^{63}$ 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 $\sqrt{ G } m^0 s^1$ 0.6058892845 $\times 10^{38}$ Unidentified	Na224 $\sqrt{ G } m^1 s^1$ 0.14977983982 $\times 10^{73}$ Unidentified	Na225 $\sqrt{ G } m^2 s^1$ 0.37026565 $\times 10^{107}$ Unidentified	Na226 $\sqrt{ G } m^3 s^1$ 0.91532118 $\times 10^{141}$ Unidentified	Na227 $\sqrt{ G } m^4 s^1$ 0.22627345 $\times 10^{175}$ Unidentified	Na228 $\sqrt{ G } m^5 s^1$ 0.55936294 $\times 10^{209}$ 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 $\times 10^{124}$ Unidentified	Na236 $\sqrt{ G } m^1 s^3$ 0.823789119 $\times 10^{158}$ Unidentified	Na237 $\sqrt{ G } m^2 s^3$ 2.0364612063 $\times 10^{192}$ Unidentified	Na238 $\sqrt{ G } m^3 s^3$ 5.0342668391 $\times 10^{226}$ Unidentified	Na239 $\sqrt{ G } m^4 s^3$ 1.2445040705 $\times 10^{261}$ Unidentified	Na240 $\sqrt{ G } m^5 s^3$ 3.0764964017 $\times 10^{295}$ Unidentified
$S^4$	Na241 $\sqrt{ G } m^0 s^4$ 0.24713673574 $\times 10^{167}$ Unidentified	Na242 $\sqrt{ G } m^1 s^4$ 0.610938361 $\times 10^{201}$ Unidentified	Na243 $\sqrt{ G } m^2 s^4$ 1.510280051 $\times 10^{235}$ Unidentified	Na244 $\sqrt{ G } m^3 s^4$ 3.733512211 $\times 10^{269}$ Unidentified	Na245 $\sqrt{ G } m^4 s^4$ 9.229489205 $\times 10^{303}$ Unidentified	Na246 $\sqrt{ G } m^5 s^4$ 2.2815907959 $\times 10^{338}$ Unidentified
$S^5$	Na247 $\sqrt{ G } m^0 s^5$ 0.1832815085 $\times 10^{167}$ Unidentified	Na248 $\sqrt{ G } m^1 s^5$ 0.453084015 $\times 10^{244}$ Unidentified	Na249 $\sqrt{ G } m^2 s^5$ 1.120053663 $\times 10^{278}$ Unidentified	Na250 $\sqrt{ G } m^3 s^5$ 2.768846761 $\times 10^{312}$ Unidentified	Na251 $\sqrt{ G } m^4 s^5$ 6.844772387 $\times 10^{346}$ Unidentified	Na252 $\sqrt{ G } m^5 s^5$ 1.692073020 $\times 10^{381}$ Unidentified

8<sup>th</sup> Table of Physical Elements PTPE-VIII No.253 ~ No.288

$\sqrt{|G|m^a s^{-b}|}$

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

	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	No.253 $\sqrt{ G m^0 s^0 }$ 0.8169809445 $\times 10^{-5}$ Value element $\sqrt{ G }$	No.254 $\sqrt{ G m^{-1} s^0 }$ 0.3304850642 $\times 10^{-39}$ 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 $\sqrt{ G m^{-1} s^1 }$ 0.2450942833 $\times 10^4$ 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 $\times 10^{-22}$ Unidentified	No.269 $\sqrt{ G m^{-4} s^2 }$ 0.120319011 $\times 10^{-56}$ Unidentified	No.270 $\sqrt{ G m^{-5} s^2 }$ 0.486714367 $\times 10^{-91}$ Unidentified
$S^3$	No.271 $\sqrt{ G m^0 s^3 }$ 0.3332391064 $\times 10^{124}$ Unidentified	No.272 $\sqrt{ G m^{-1} s^3 }$ 0.1348018558 $\times 10^{90}$ Unidentified	No.273 $\sqrt{ G m^{-2} s^3 }$ 0.545300356 $\times 10^{55}$ Unidentified	No.274 $\sqrt{ G m^{-3} s^3 }$ 0.220584855 $\times 10^{21}$ Unidentified	No.275 $\sqrt{ G m^{-4} s^3 }$ 0.8923096735 $\times 10^{-14}$ Unidentified	No.276 $\sqrt{ G m^{-5} s^3 }$ 0.360957035 $\times 10^{-48}$ Unidentified
$S^4$	No.277 $\sqrt{ G m^0 s^4 }$ 0.247136735 $\times 10^{167}$ Unidentified	No.278 $\sqrt{ G m^{-1} s^4 }$ 0.9997173194 $\times 10^{132}$ Unidentified	No.279 $\sqrt{ G m^{-2} s^4 }$ 0.404405567 $\times 10^{98}$ Unidentified	No.280 $\sqrt{ G m^{-3} s^4 }$ 0.163590106 $\times 10^{64}$ Unidentified	No.281 $\sqrt{ G m^{-4} s^4 }$ 0.661754565 $\times 10^{29}$ Unidentified	No.282 $\sqrt{ G m^{-5} s^4 }$ 0.267692902 $\times 10^{-5}$ Unidentified
$S^5$	No.283 $\sqrt{ G m^0 s^5 }$ 0.183281508 $\times 10^{210}$ Unidentified	No.284 $\sqrt{ G m^{-1} s^5 }$ 0.7414102072 $\times 10^{175}$ Unidentified	No.285 $\sqrt{ G m^{-2} s^5 }$ 0.299915195 $\times 10^{141}$ Unidentified	No.286 $\sqrt{ G m^{-3} s^5 }$ 0.121321670 $\times 10^{107}$ Unidentified	No.287 $\sqrt{ G m^{-4} s^5 }$ 0.490770320 $\times 10^{72}$ Unidentified	No.288 $\sqrt{ G m^{-5} s^5 }$ 0.198526369 $\times 10^{38}$ Unidentified

9<sup>th</sup> Table of Physical Elements PTPE-IX No.289 ~ No.324

$m^a s^{-b}$

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

	$m^0$	$m^1$	$m^2$	$m^3$	$m^4$	$m^5$
$S^0$	No.289 $m^0 s^0$ 1.000000000 $\times 10^0$ Vale 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 $s^1$ $m^0 s^{-1}$ 1.3483997249 $\times 10^{-43}$ Time of minus one dimension	No.296 $m^1 s^{-1}$ 0.33333333 $\times 10^{-8}$ Velocity $ms^{-1}$	No.297 $m^2 s^{-1}$ 0.82402205 $\times 10^{26}$ 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 $s^2$ $m^0 s^{-2}$ 1.81818181818 $\times 10^{-86}$ Time of minus two dimensions	No.302 $m^1 s^{-2}$ 0.44946657 $\times 10^{-51}$ Acceleration $ms^{-2}$	No.303 $m^2 s^{-2}$ 1.11111111 $\times 10^{-17}$ 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 $s^3$ $m^0 s^{-3}$ 2.4516358635 $\times 10^{-129}$ Time of minus three dimensions	No.308 $m^1 s^{-3}$ 6.06060606 $\times 10^{-95}$ Unidentified	No.309 $m^2 s^{-3}$ 1.49822191 $\times 10^{-60}$ 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 $s^4$ $m^0 s^{-4}$ 3.3057851239 $\times 10^{-172}$ Time of minus four dimensions	No.314 $m^1 s^{-4}$ 8.17211954 $\times 10^{-138}$ 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 $s^5$ $m^0 s^{-5}$ 4.4575197518 $\times 10^{-215}$ Time of minus five dimensions	No.320 $m^1 s^{-5}$ 1.10192837 $\times 10^{-180}$ Unidentified	No.321 $m^2 s^{-5}$ 2.72403984 $\times 10^{-146}$ 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 $\times 10^{-43}$ Unidentified

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

$m^a s^{-b}$

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

	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	<b>No.325</b> $m^0 s^0$ 1.000000000 $\times 10^0$ Value element 1	<b>No.326</b> $m^{-1} s^0$ 0.40451991 $\times 10^{-34}$ Space of minus one dimension $m^{-1}$	<b>No.327</b> $m^{-2} s^0$ 0.1636363636 $\times 10^{-68}$ Space of minus two dimensions $m^{-2}$	<b>No.328</b> $m^{-3} s^0$ 0.661941683 $\times 10^{-103}$ Space of minus three dimensions $m^{-3}$	<b>No.329</b> $m^{-4} s^0$ 0.267768595 $\times 10^{-137}$ Space of minus four dimensions $m^{-4}$	<b>No.330</b> $m^{-5} s^0$ 0.108317729 $\times 10^{-171}$ Space of minus five dimensions $m^{-5}$
$S^{-1}$	<b>No.331 Hz</b> $m^0 s^{-1}$ 1.3483997249 $\times 10^{-43}$ Frequency	<b>No.332</b> $m^{-1} s^{-1}$ 0.5454545454 $\times 10^{-77}$ Unidentified	<b>No.333</b> $m^{-2} s^{-1}$ 0.220647227 $\times 10^{-111}$ Unidentified	<b>No.334</b> $m^{-3} s^{-1}$ 0.892561983 $\times 10^{-146}$ Unidentified	<b>No.335</b> $m^{-4} s^{-1}$ 0.361059099 $\times 10^{-180}$ Unidentified	<b>No.336</b> $m^{-5} s^{-1}$ 0.146055597 $\times 10^{-214}$ Unidentified
$S^{-2}$	<b>No.337 <math>s^{-2}</math></b> $m^0 s^{-2}$ 1.8181818181 $\times 10^{-86}$ Time of minus two dimensions	<b>No.338</b> $m^{-1} s^{-2}$ 0.735490759 $\times 10^{-120}$ Unidentified	<b>No.339</b> $m^{-2} s^{-2}$ 0.297520661 $\times 10^{-154}$ Unidentified	<b>No.340</b> $m^{-3} s^{-2}$ 0.120353033 $\times 10^{-188}$ Unidentified	<b>No.341</b> $m^{-4} s^{-2}$ 0.486851990 $\times 10^{-223}$ Unidentified	<b>No.342</b> $m^{-5} s^{-2}$ 0.196941327 $\times 10^{-257}$ Unidentified
$S^{-3}$	<b>No.343 <math>s^{-3}</math></b> $m^0 s^{-3}$ 2.4516358635 $\times 10^{-129}$ Time of minus three dimensions	<b>No.344</b> $m^{-1} s^{-3}$ 0.991735537 $\times 10^{-163}$ Unidentified	<b>No.345</b> $m^{-2} s^{-3}$ 0.401176777 $\times 10^{-197}$ Unidentified	<b>No.346</b> $m^{-3} s^{-3}$ 0.162283996 $\times 10^{-231}$ Unidentified	<b>No.347</b> $m^{-4} s^{-3}$ 0.656471090 $\times 10^{-266}$ Unidentified	<b>No.348</b> $m^{-5} s^{-3}$ 0.265555631 $\times 10^{-300}$ Unidentified
$S^{-4}$	<b>No.349 <math>s^{-4}</math></b> $m^0 s^{-4}$ 3.3057851239 $\times 10^{-172}$ Time of minus four dimensions	<b>No.350</b> $m^{-1} s^{-4}$ 1.337255925 $\times 10^{-206}$ Unidentified	<b>No.351</b> $m^{-2} s^{-4}$ 0.540946656 $\times 10^{-240}$ Unidentified	<b>No.352</b> $m^{-3} s^{-4}$ 0.218823696 $\times 10^{-274}$ Unidentified	<b>No.353</b> $m^{-4} s^{-4}$ 0.885185438 $\times 10^{-309}$ Unidentified	<b>No.354</b> $m^{-5} s^{-4}$ 0.358075140 $\times 10^{-343}$ Unidentified
$S^{-5}$	<b>No.355 <math>s^{-5}</math></b> $m^0 s^{-5}$ 4.4575197518 $\times 10^{-215}$ Time of minus five dimensions	<b>No.356</b> $m^{-1} s^{-5}$ 1.803155522 $\times 10^{-249}$ Unidentified	<b>No.357</b> $m^{-2} s^{-5}$ 0.729412323 $\times 10^{-283}$ Unidentified	<b>No.358</b> $m^{-3} s^{-5}$ 0.295061812 $\times 10^{-317}$ Unidentified	<b>No.359</b> $m^{-4} s^{-5}$ 0.119358380 $\times 10^{-351}$ Unidentified	<b>No.360</b> $m^{-5} s^{-5}$ 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 $s^1$ $m^0 s^1$ 0.741619848709 $\times 10^{43}$ Time of one dimension	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 $s^2$ $m^0 s^2$ 0.550000000000 $\times 10^{86}$ Time of two dimensions	No.374 $m^1 s^2$ 1.3596363893 $\times 10^{120}$ Unidentified	No.375 $m^2 s^2$ 3.361111111111 $\times 10^{154}$ 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 $s^3$ $m^0 s^3$ 0.40789091679 $\times 10^{129}$ Time of three dimensions	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 $s^4$ $m^0 s^4$ 0.302499999999 $\times 10^{172}$ Time of four dimensions	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 $s^5$ $m^0 s^5$ 0.22434000423 $\times 10^{215}$ Time of five dimensions	No.392 $m^1 s^5$ 0.5545833333 $\times 10^{249}$ Unidentified	No.393 $m^2 s^5$ 1.37096666925 $\times 10^{283}$ 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

$m^a s^{-b}$   $a = 0, -1, -2, -3, -4, -5$  ;  $b = 0, -1, -2, -3, -4, -5$  ;  $B = 1$

	$m^0$	$m^{-1}$	$m^{-2}$	$m^{-3}$	$m^{-4}$	$m^{-5}$
$S^0$	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 $s$ $m^0 s^1$ 0.74161984870 $\times 10^{43}$ Time of one dimension	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 $s^2$ $m^0 s^2$ 0.550000000000 $\times 10^{86}$ Time of two dimensions	No.410 $m^{-1} s^2$ 0.22248595 $\times 10^{52}$ 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 $s^3$ $m^0 s^3$ 0.40789091679 $\times 10^{129}$ Time of three dimensions	No.416 $m^{-1} s^3$ 1.649999999 $\times 10^{94}$ Unidentified	No.417 $m^{-2} s^3$ 0.667457863 $\times 10^{60}$ Unidentified	No.418 $m^{-3} s^3$ 0.2699999999 $\times 10^{26}$ 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 $s^4$ $m^0 s^4$ 0.30249999999 $\times 10^{172}$ Time of four dimensions	No.422 $m^{-1} s^4$ 0.12236727 $\times 10^{138}$ Unidentified	No.423 $m^{-2} s^4$ 0.4949999999 $\times 10^{103}$ Unidentified	No.424 $m^{-3} s^4$ 0.2002373591 $\times 10^{69}$ Unidentified	No.425 $m^{-4} s^4$ 0.8099999999 $\times 10^{34}$ Unidentified	No.426 $m^{-5} s^4$ 0.3276611331 $\times 10^0$ Unidentified
$S^5$	No.427 $s^5$ $m^0 s^5$ 0.22434000423 $\times 10^{215}$ Time of five dimenssions	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 $m^{-3} s^5$ 0.1484999999 $\times 10^{112}$ Unidentified	No.431 $m^{-4} s^5$ 0.6007120774 $\times 10^{77}$ Unidentified	No.432 $m^{-5} s^5$ 0.2429999999 $\times 10^{43}$ Unidentified

13<sup>th</sup> Table of Physical Elements PTPE- XIII-A No.433 ~ No.444

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

$ G  m^a s^{-b}$	$m^0$	$m^{\pm 1}$	$m^{\pm 2}$	$m^{\pm 3}$	$m^{\pm 4}$	$m^{\pm 5}$
$S^0$	<p>No.433  <math>Bm^0 s^0</math>                      Value element  <math>B \geq  G </math></p>	<p>No.434 – 1  <math>\frac{ N_A  \times 10^{23}}{a^1}  Gms^0</math>                      0.724405343545  <math>\times 10^{23}</math>                      Entropy  <math>S</math></p> <p>No.434 – 2  <math>a^{-1}m</math>                      0.3386730639  <math>\times 10^{37}</math>                      mol conductivity  <math>kg^{-1}mol^{-1}s^3A^2</math></p>	No.435 Unidentified	No.436 Unidentified	No.437 Unidentified	No.438 Unidentified
$S^{\pm 1}$	<p>No.439 – 1  <math>\frac{ N_A  \times 10^{23}}{a^{-1}}  G m^0s^{-1}</math>                      0.395130187388  <math>\times 10^{-54}</math>                      Heat conductivity  <math>Wm^{-1}K^{-1}</math></p> <p>No.439 – 2  <math>m^0s^{-1}</math>                      1.3483997249  <math>\times 10^{-43}</math>                      Radioactivity  <math>Bq</math></p>	<p>No.440 – 1  <math> N_A  \times 10^{23}  Gm^1s^1</math>                      1.204379562043  <math>\times 10^{-1}</math>                      mol entropy  <math>JK^{-1}mol^{-1}</math></p> <p>No.440 – 2  <math>a^{-1}m^1s^1</math>                      2.51166666666666  <math>\times 10^{79}</math>                      mol volume  <math>m^3mol^{-1}</math></p> <p>No.440 – 3  <math>am^{-1}s^{-1}</math>                      0.398142003981  <math>\times 10^{-79}</math>                      mol density  <math>mol \cdot m^{-3}</math></p>	<p>No.441  <math>am^2s^{-1}</math>                      6.014759519  <math>\times 10^{23}</math>                      mole  <math>mol</math></p>	No.442 Unidentified	No.443 Unidentified	No.444 Unidentified

**13<sup>th</sup> Table of Physical Elements** PTPE- X III-B No.445 ~ No.468  
 $a = 0, \pm 1, \pm 2, \pm 3, \pm 4, \pm 5$   $b = 0, \pm 1, \pm 2, \pm 3, \pm 4, \pm 5$

$S^{\pm 2}$	<p><b>No.445 – 1</b></p> <p><math> M_G  s_{i,i-1}^{-2}</math> 0.99173553 <math>\times 10^{-93}</math> Unit information</p> <p><b>No.445 – 2</b></p> <p><math> G ^{-1} m^0 s^2</math> 0.824022054121 <math>\times 10^{96}</math> Specific volume <math>m^3 kg^{-1}</math></p>	No.446 Unidentified	<p><b>No.447</b></p> <p><math>a N_A  \times 10^{23} m^{-2} s^2</math> 0.3951301873 <math>\times 10^{16}</math> Specific entropy <math>kg^{-1} K^{-1} J</math></p>	<p><b>No.448</b></p> <p><math>Bm^{\pm 3} s^{\pm 2}</math> <math>STV(Bm^{\pm 3} s^{\pm 2})</math> Unidentified</p>	<p><b>No.449</b></p> <p><math>Bm^{\pm 4} s^{\pm 2}</math> <math>STV(Bm^{\pm 4} s^{\pm 2})</math> Unidentified</p>	No.450 Unidentified
$S^{\pm 3}$	<p><b>No.451</b></p> <p><math>Bm^0 s^{\pm 3}</math> <math>STV(Bm^0 s^{\pm 3})</math> Unidentified</p>	No.452 Unidentified	<p><b>No.453</b></p> <p><math>Bm^{\pm 2} s^{\pm 3}</math> <math>STV(Bm^{\pm 2} s^{\pm 3})</math> Unidentified</p>	<p><b>No.454</b></p> <p><math>a^{-1}  G  m^3 s^{-3}</math> 3.38673064244 <math>\times 10^{-34}</math> Mol energy <math>J \cdot mol^{-1}</math></p>	<p><b>No.455</b></p> <p><math>Bm^{\pm 4} s^{\pm 3}</math> <math>STV(Bm^{\pm 4} s^{\pm 3})</math> Unidentified</p>	No.456 Unidentified
$S^{\pm 4}$	<p><b>No.457</b></p> <p><math>Bm^0 s^{\pm 4}</math> <math>STV(Bm^0 s^{\pm 4})</math> Unidentified</p>	No.458 Unidentified	<p><b>No.459</b></p> <p><math>Bm^{\pm 2} s^{\pm 4}</math> <math>STV(Bm^{\pm 2} s^{\pm 4})</math> Unidentified</p>	<p><b>No.460</b></p> <p><math>Bm^{\pm 3} s^{\pm 4}</math> <math>STV(Bm^{\pm 3} s^{\pm 4})</math> Unidentified</p>	<p><b>No.461</b></p> <p><math>\frac{a^{-1}}{ N_A  \times 10^{-23}} m^4 s^{-4}</math> 2.812012715238 <math>\times 10^{-33}</math> Thermodynamic temperature <math>K</math></p>	No.462 Unidentified
$S^{\pm 5}$	<p><b>No.463</b></p> <p><math>Bm^0 s^{\pm 6}</math> <math>STV(Bm^0 s^{\pm 6})</math> Unidentified</p>	No.464 Unidentified	<p><b>No.465</b></p> <p><math>Bm^{\pm 2} s^{\pm 5}</math> <math>STV(Bm^{\pm 2} s^{\pm 5})</math> Unidentified</p>	<p><b>No.466</b></p> <p><math>Bm^{\pm 3} s^{\pm 5}</math> <math>STV(Bm^{\pm 3} s^{\pm 5})</math> Unidentified</p>	<p><b>No.467</b></p> <p><math>Bm^{\pm 4} s^{\pm 25}</math> <math>STV(Bm^{\pm 4} s^{\pm 25})</math> Unidentified</p>	No.468 Unidentified

#### 4, 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 conducive to discover new physical elements by similarity in *STC*

For instance, No.16 mass element  $|G|m^3s^{-2}$  and No.160 electric quantity element  $\sqrt{|G|m^3s^{-2}}$  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 electromagnetic respectively.

Another example, No.24 angular moment element  $|G|m^5s^{-3}$  and No.168 magnetic moment element  $\sqrt{|G|m^5s^{-3}}$  are same in term of dimensional spaces and dimensional times, difference in between is only coefficient. These two elements have similarity in *STC*, while these two elements have similar role in mechanics and electromagnetic 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 energy element  $|G|m^5s^{-4}$ , we can speculate meaning of No.174 unknown element  $\sqrt{|G|m^5s^{-4}}$  in electromagnetic.

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

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

For instance , by some contents in 1<sup>st</sup> and 5<sup>th</sup> table 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 related in physics[3], it is well known that No.23 energy element interacts with one dimensional space to produces No.24 angular moment element. Time rage of No.30 energy element produces No.36 power element. Time rage of No.24 momentum element produces No.30 energy element. Time rage of No.160 electric quantity element produces No.166 electric current strength element.

So it is much easier to make clear about relations for some physical elements known, such as , time rage of No.158 electric field strength element produces No.164 density of electric current element Time rage of No.159 voltage element produces No.165 magnetic field strength element.

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

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

<p><b>No.164</b>  <math>\sqrt{ G m^1s^{-3}}</math>                      4.951399664  <math>\times 10^{-100}</math>                      Density of electric current  <math>Am^{-2}</math></p>	<p><b>No.165</b>  <math>\sqrt{ G m^2s^{-3}}</math>                      0.12240187566  <math>\times 10^{-64}</math>                      Strength of magnetic field  <math>Am^{-1}</math></p>	<p><b>No.166</b>  <math>\sqrt{ G m^3s^{-3}}</math>                      0.30258553503  <math>\times 10^{-30}</math>                      Strength of electric current  <math>A</math></p>	<p><b>No.167</b>  <math>\sqrt{ G m^4s^{-3}}</math>                      7.4801146238  <math>\times 10^3</math>                      Unidentified</p>	<p><b>No.168</b>  <math>\sqrt{ G m^5s^{-3}}</math>                      0.18491338252  <math>\times 10^{39}</math>                      Magnetic moment  <math>JT^{-1}</math></p>
<p><b>No.170</b>  <math>\sqrt{ G m^1s^{-4}}</math>                      6.676465945  <math>\times 10^{-143}</math>                      Unidentified</p>	<p><b>No.171</b>  <math>\sqrt{ G m^2s^{-4}}</math>                      1.650466554  <math>\times 10^{-108}</math>                      Unidentified</p>	<p><b>No.172</b>  <math>\sqrt{ G m^3s^{-4}}</math>                      4.080062522  <math>\times 10^{-74}</math>                      Unidentified</p>	<p><b>No.173</b>  <math>\sqrt{ G m^4s^{-4}}</math>                      1.008618450  <math>\times 10^{-39}</math>                      Unidentified</p>	<p><b>No.174</b>  <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><b>No.362</b>  <math>m^1s^0</math>                      2.47206616  <math>\times 10^{34}</math>                      Capacitance  <math>F</math></p>	6.11111111	1.5107070992	3.7345679012
Value element		Space of two dimensions	Space of three dimensions	Space of four 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><i>No.151</i>  <math>\sqrt{ G m^0 s^{-1}}</math>                      0.110161688096  <math>\times 10^{-47}</math>                      Magnetic flux density  <i>T</i></p>	<p><i>No.152</i>  <math>\sqrt{ G m^1 s^{-1}}</math>                      2.7232698153  <math>\times 10^{-14}</math>                      Unidentified</p>	<p><i>No.153</i>  <math>\sqrt{ G m^2 s^{-1}}</math>                      0.67321031614  <math>\times 10^{21}</math>                      Magnetic flux  <i>W<sub>b</sub></i></p>	<p><i>No.154</i>  <math>\sqrt{ G m^3 s^{-1}}</math>                      1.6642204427  <math>\times 10^{55}</math>                      Unidentified</p>	
<p><i>No.157</i>  <math>\sqrt{ G m^0 s^{-2}}</math>                      1.48541989927  <math>\times 10^{-91}</math>                      Charge density  <i>Cm<sup>-3</sup></i></p>	<p><i>No.158</i>  <math>\sqrt{ G m^1 s^{-2}}</math>                      0.3672056269  <math>\times 10^{-56}</math>                      Strength of electric field  <i>Vm<sup>-1</sup></i></p>	<p><i>No.159</i>  <math>\sqrt{ G m^2 s^{-2}}</math>                      0.90775660511  <math>\times 10^{-22}</math>                      Voltage  <i>V</i></p>	<p><i>No.160</i>  <math>\sqrt{ G m^3 s^{-2}}</math>                      0.22440343871  <math>\times 10^{13}</math>                      Electric quantity  <i>C</i></p>	<p><i>No.161</i>  <math>\sqrt{ G m^4 s^{-2}}</math>                      5.5474014756  <math>\times 10^{46}</math>                      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, with No.153 element of magnetic flux to produce No.154 element unknown, 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, with No.158 element of electric field strength also to produce No.159 element of voltage, with No.159 element of voltage also to produce No.160 element of electric quantity.

## APPENDIX Definition of Dimensional Spaces and Dimensional Times

### Definition of Dimensional Spaces

To define physical elements denoted  $m^a$  as  $a$  dimensional spaces, and call  $a$  as number of dimensions of  $a$  dimensional spaces, where  $m$  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  $s^b$  as  $b$  dimensional spaces, and call  $b$  as number of dimensions of  $b$  dimensional times, where  $s$  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.

**Remark:** Regarding authenticity and substantiality of dimensional spaces and dimensional times, the author have investigated them from perspectives of cosmology with help of those experimental results and astronomical observations available at present. The investigation results fully support existence of dimensional spaces and dimensional times. To this regard, the author will present all results in another paper

### **References**

- [1] International System of Units, Wikipedia  
[http://en.wikipedia.org/wiki/International\\_System\\_of\\_Units](http://en.wikipedia.org/wiki/International_System_of_Units)
- [2] Planck Units, Wikipedia  
[http://en.wikipedia.org/wiki/Planck\\_units](http://en.wikipedia.org/wiki/Planck_units)
- [3] Dictionary of Physics , Longdao Xu , Beijing , 2004,5 , Science Press