# **Photons Structure**

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Abstract: Substance's mass infinitely divisible. Substance mass infinitesimal small objects called magneton. Magneton mass tends to zero, but will never zero. Magnetic and spin are the magneton talent mettle.

Magnetic force enables multiple magneton orderly bond together, to form magneton group. Magneton bond into small and simple magneton group. Small and simple magneton group bond into big and complex magneton group. every hue independent magneton group construct every hue material forms.

Magneton collide with each other, make its spin speed and magneton's beeline speed transformed into each other. Bond into magneton group the magneton all maintain original characteristics. Magneton group have magneton the same characteristics. speed reach light speed, mass is about 10<sup>-35</sup> kg, such independent magneton group is photon.

Key words: Magneton, Magneton group, Micro-speed photon, Low-speed photon, Photon

## **0.** Foreword

Relative to human race limited capabilities. Universe space infinity big. No most big, only more big. Substance's mass infinitely divisible. No most tiny, only more tiny. Substance mass infinitesimal small objects called magneton. Magneton mass tends to zero, but will never zero.

Magnetic and spin are the magneton talent mettle.

Magnetic force make the magneton attract each other, and orderly arrange. Magneton orderly bond, form universe all objects.

Magneton collide with each other, make its spin speed and magneton's beeline speed

transformed into each other.

# **1. Magneton Characteristics**

Magneton has beeline kinetic energy and spin kinetic energy. Magneton collide with each

other, make its beeline kinetic energy and spin kinetic energy interchangeable with each other.

Magneton's spin axis is perpendicular to its movement direction.

Magneton's magnetic poles at its spin axis both ends.

Magneton's charge absolute value is proportional to its spin kinetic energy.

With positive charge magneton comply with left hand spin rule. Left hand spin rule is, left thumb pointing to north, four fingers bending direction pointing to spin direction.

With negatively charged magneton comply with right hand spin rule. Right hand spin rule is, right thumb pointing to north, four fingers bending direction pointing to spin direction.

## 2. Magneton Group

Magnetic force enables multiple magneton orderly bond together, to form magneton group. Bond into magneton group the magneton all maintain original characteristics. Magneton group have magneton the same characteristics.

#### **2.1. Line Shape Magneton Group**

Plurality magneton heterosexual magnetic pole tandem, bond into line shape magneton group. Line shape magneton group magnetic pole at ite both ends.

#### **2.2. Ring Shape Magneton Group**

Line shape magneton group's both ends attached, bond into ring shape magneton group. Ring shape magneton group magnetic pole at its center axis both ends.

#### **2.3. Solenoid Shape Magneton Group**

Line shape magneton group vertical spiral wound, bond into solenoid shape magneton group. Solenoid shape magneton group magnetic pole at its both ends.

#### 2.4. Hexagon Pie Shape Magneton Group

Line shape magneton group plane circle wound, bond into hexagon pie shape magneton group. Hexagon pie shape magneton group magnetic pole at its center axis both ends.

### 2.5. Hollow Tube Shape Magneton Group

Plurality same size ring shape magneton group superimposition, bond into hollow tube shape magneton group. Hollow tube shape magneton group magnetic pole at its both ends.

## 2.6. Hexagon Stick Shape Magneton Group

Plurality same size hexagon pie shape magneton group superimposition, bond into hexagon stick shape magneton group. Hexagon stick shape magneton group magnetic pole at its both ends.

#### 2.7. Rope Shape Magneton Group

Plurality line shape magneton group, solenoid shape magneton group, hollow tube shape magneton group, hexagon stick shape magneton group juxtapose, bond into rope shape magneton group. Rope shape magneton group magnetic pole at its both ends.

#### **2.8.** Complex Magneton Group

Just like line shape magneton group, rope shape magneton group can bond into ring shape magneton group, solenoid shape magneton group, hexagon pie shape magneton group, hollow tube shape magneton group, hexagon stick shape magneton group.

So the cycle, a large number magneton bond into complex magneton group. Complex magneton group is magneton group universal form.

## **3. Environment And Magneton Group Structure**

Magneton bond into small and simple magneton group. Small and simple magneton group bond into big and complex magneton group.

Magneton group mass, magnetic filed, electric filed, respectively is its all magneton mass, magnetic filed, electric filed the sum.

Environment determine magneton group structure. In same environment, magnetic force can accurately replicate same structure magneton group. Environment difference so that magneton group structure very different.

When environmental magnetic field, electric field, temperature remain stable, magneton group structure remain stable. At this moment, magneton group become stable free independent

magneton group.

Electromagnetic force make independent magneton group maintain stereoscopic grids

ordered arrangement.

Magneton group structure determine magneton group substance form.

## **3.1. Magneton Group Electromagnetic Field**

Magnetic field direction same bond, called magnetic same bond. Magnetic field direction

contrary bond, called magnetic contrary bond.

Magnetic same bond, make magneton group magnetic field increased. Magnetic contrary bond, make magneton group magnetic field weakened.

**Electric field direction same bond, called electric same bond. Electric field direction** contrary bond, called electric contrary bond.

Electric same bond, make magneton group electric field increased. Electric contrary bond, make magneton group electric field weakened.

In strong magnetic field, magnetic contrary bond magneton group is split. And, re-combined into magnetic same bond magneton group.

So, in strong magnetic field bond magneton group, most are magnetic same bond magneton group, magnetic field relatively is strong. In weak magnetic field bond magneton group, most are magnetic contrary bond magneton group, magnetic field relatively is weak.

In strong electric field, electric contrary bond magneton group is split. And, re-combined into electric same bond magneton group.

So, in strong electric field bond magneton group, most are electric same bond magneton group, electric field relatively is strong. In weak electric field bond magneton group, most are electric contrary bond magneton group, electric field relatively is weak.

#### **3.2.** Magneton Group Magneton number

In high temperature environment, collision between magneton group intensifies, larger magneton group split into smaller magneton group.

So, in high temperature environment bond magneton group, its magneton number less. In low temperature environment bond magneton group, its magneton number more.

**Environment temperature increase, larger magneton group split into smaller magneton** group. Environment temperature decreases, smaller magneton group bond into larger magneton group.

Magneton group's magneton number is proportional to environment temperature.

#### **3.3. Magneton Group Mass**

Magneton group mass is proportional to its magneton number.

When mass is about 10<sup>-35</sup> kg, independent magneton group become micro-speed photon.

Micro-speed photon has magneton all characteristics.

Micro-speed photon can continue to bond into neutrons, protons, atoms.

Micro-speed photon has beeline kinetic energy and spin kinetic energy. Micro-speed photon collide with each other, make its beeline kinetic energy and spin kinetic energy interchangeable with each other.

When micro-speed photon beeline speed reached low-speed, it becomes low-speed photon. When micro-speed photon beeline speed reached light-speed, it becomes photon.

# **0.** Epilogue

speed reach light speed, mass is about 10<sup>-35</sup> kg, such independent magneton group is photon.

In ultra-high temperature environment, big independent magneton group split into small independent magneton group. In ultra-low temperature environment, small independent magneton group bonded into big independent magneton group. At normal temperature environment, every hue independent magneton group construct every hue material forms.