

Current changes the direction of photon bending and polarization

HuangWeiXiong

January 3, 2020

Abstract:

In 1919, British scientist Eddington found that the photon track is an arc.

Two phenomena are found by studying the properties of photons.

1. In the case of unchanged emission, refraction and reflection conditions, the current can change the direction of photon bending.

2. In the case of unchanged emission, refraction and reflection conditions, the current can change the direction of photon polarization.

Key word:

Point positioning laser, conductive glass.

0. Preface

Emission, refraction and reflection are known methods to change the advance direction of photon.

In 1919, British scientist Eddington found that the photon track is an arc.

In other words, in the case of unchanged emission, refraction and reflection conditions, the photon track is not a straight line either.

In the case of unchanged emission, refraction and reflection conditions, who changes the advance direction of photon? Who causes photon track to bend? Who controls the bending direction of photon?

Is not this an interesting question?

1. Experimental equipment

405nm, point positioning laser, 1.

ITO conductive glass, 130mm long, 11mm wide, 3mm thick, 2.

Two conductive glasses are overlapped, and metal electrodes are inserted at both ends.

2. Current changes the bending direction of photon

On one side of the conductive glass, a point positioning laser, a target plate and a remote control camera are installed.

Install the reflector on the other side of the conductive glass at a distance of 10m.

The laser passes vertically through the conductive glass. Reflected on the target plate by a mirror. The remote camera records the spot image.

When the direct current passes through the conductive glass, the shape of the spot changes significantly. It shows that the bending direction of photons in the laser changes. It is proved that, in the case of unchanged emission, refraction and reflection conditions, the current changes the direction of photon bending.

Please look at the YouTube video for the experiment.

<https://www.youtube.com/watch?v=OISxzAkGPc&t=4s>

3. Current changes the direction of photon polarization

On one side of the conductive glass, a point positioning laser is installed.

On the other side of the conductive glass, a polarizer and a target plate are installed.

The laser passes vertically through the conductive glass. Pass through the polarizer and hit the target plate. Rotate the polarizer to make the spot darkest. The remote camera records the spot image.

When the direct current passes through the conductive glass, the brightness of the spot increases significantly. It shows that the polarization direction of photons in the laser changes. It is proved that, in the case of unchanged emission, refraction and reflection conditions, the current changes the direction of photon polarization.

Please look at the YouTube video for the experiment.

<https://www.youtube.com/watch?v=7dmcT5EJb6c>

4. conclusion

These two phenomena lead to two inferences.

1. Known that magnetic field can change the direction of electron bending. Can magnetic fields also change the direction of photon bending?

2. Known that current can change the direction of photon bending and polarization simultaneously. Can the direction of photon bending determine the direction of photon

polarization?

Answering these questions is HuangZi Theory Laboratory strive direction.