“Breaking the Limits of Classical Physics”

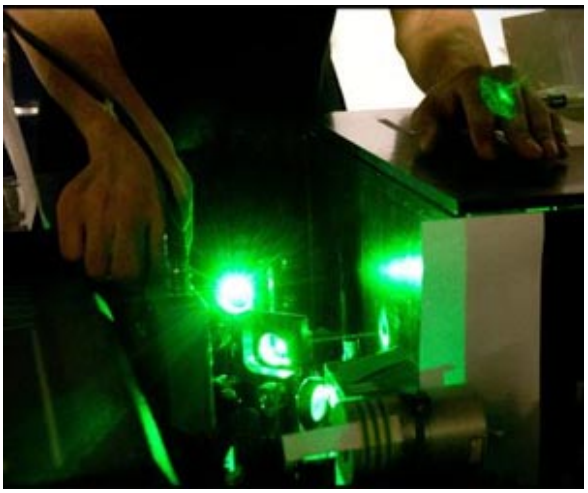

PHOTO: Niels Bohr Institute

In the quantum optical laboratories at the Niels Bohr Institute, researchers have conducted experiments that show that light breaks with classical physical principles. The studies show that light can have both an electrical and a magnetic field, but not at the same time. That is to say, light has quantum mechanical properties.

A staff article on spacedaily.com tells us what the researchers found. Consociate Ron Theriault reviewed the article and has this to say about it:

“It is no surprise to anyone trained in modern physics that light is described by quantum mechanics. In the early 20th century Albert Einstein described the photoelectric effect by assuming that light is quantized into indivisible packets which we now call photons. His paper put the final nail into the coffin containing the idea that light is exclusively a wave phenomenon.

“These researchers are exploring the boundary between the quantum and

classical ‘worlds,’ and have apparently published something of note. There isn’t much detail in the article to determine exactly what it is, however. It is nonetheless interesting that researchers are still discovering new things about light.”

Read the article online at spacedaily.com .

Link submitted by Frieda Nelson.