

New book reveals why physics students are wasting years of study

Millions of students worldwide are being taught erroneous concepts about quantum physics, leading to years of fruitless study and dead-end research.

LONDON, ENGLAND, UK, August 12, 2024 /EINPresswire.com/ -- "Recent highly publicised scandals have gotten the physics community worried about its reputation—and its future. Over the last five years, several claims of major breakthroughs in quantum computing and superconducting research, published in prestigious journals, have disintegrated as other researchers found they could not reproduce the blockbuster results" (source: Sophia Chen, MIT Technology Review, 15 May, 2024).

What is going on? Many scientists are witnessing the rise of pseudoscience and outdated concepts as highlighted by HG Gauch in his book Scientific Method in Brief (CUP, 2012).

FINAL THEORY LIGHT
& Finding Extraterrestrials

RUSSELL EATON

Book cover

Most branches of science and physics require a basic understanding of the nature of light. But many erroneous and outdated concepts are being taught in particle physics that traps students into fruitless studies and a falling out with science: "There is a catastrophic decline in the number of students studying physics" according to David Blair, physicist and winner of the 2020 Australian Science Prize, University of Western Australia. Blair explains that within a few years there will be very few physicists in many branches of science.

Contemporary quantum physics is full of pseudoscience and misconceptions. Here's an example: "A common misconception is that light can only be reflected from shiny surfaces such as a mirror" (Jessica Fries-Gaither, Common Misconceptions about Light, Heat, and the Sun, Ohio State University). In fact, light is continually reflecting off everything around us by being absorbed into objects and then emitted out again in place of the light absorbed.

Back in 2018 John Winfrey, a physicist, was already warning the 'American Association of Physics Teachers' that light is seriously misunderstood: "For several decades, we have known that misconceptions regarding the nature of light in Physics and Astronomy have crept into public school textbooks".

Here's another example among the many that will be familiar to physics students: the famous and well-known 'photoelectric effect'. This is described by Wikipedia as "the emission of electrons from a material caused by shining light upon such a material". Countless experiments show the veracity of the photoelectric effect, confirming that light is made of streams of separate moving photons.

Applications of the photoelectric effect include solar panels, light sensors, digital cameras, smoke detectors, and many other applications (Encyclopaedia Britannica). Yet it is very widely (albeit erroneously) taught that light is made of light-waves, i.e. fields of connected photons. But

TEORÍA FINAL LUZ Y Búsqueda de Extraterrestres

RUSSELL EATON

Cubierta del libro

light-waves have never been able to replicate the mentioned photoelectric effect, thus showing the falsehood of light as a so-called light-wave.

The confused and erroneous teaching of quantum physics and the nature of light is very widespread in contemporary science and leads to years of wasted time. "Misconceptions in physics appear to be broadly widespread among students, with electromagnetism [light] being the worst" (M. Bozzi, et al, Highlight misconceptions in physics, 2019).

Further evidence comes from Quanta Magazine (Charlie Wood, 12 August 2024): "Fundamental physics is in a crisis, with some researchers saying the field faces a "nightmare scenario" as many researchers look for a new direction in physics.

Millions of physics students are today going down blind alleys and rabbit holes full of misguided concepts. This in turn leads to blighted careers, and a falling out in the pursuit of science, as explained by Russell Eaton in his book 'Final Theory of Light, & Finding Extraterrestrials'.

Particle physics has not seen progress since the 1970s when the standard model of particle physics was completed. Ever since then, the theories used to describe observations in physics have remained unchanged. Little by little the standard model of particle physics has become more and more outdated and inconsistent.

The stagnation in particle physics over many decades simply cannot be denied. The evidence is

overwhelming and growing:

"The current edifice of physics is internally convoluted, with many self-contradictions" (Wei Guo, article, Research Gate, Fudan University, Why Modern Physics Stagnation for a Century? April 24).

"Particle physics is absolutely stuck. We need to find something new because the standard model is incomplete. In physics we don't know where we are heading. The standard model needs something else" (Pauline Gagnon, physicist, Particle physics is stuck, presentation to the Royal Institution, Nov. 2022).

"In common with arguments that Lee Smolin and I were making in our books published back in 2006, the underlying problem is that the way theorists successfully worked in the seventies is no longer viable" (P. Woit, physicist, Columbia University, Why the foundations of physics have not progressed for 40 years, 2020).

"The standard model of quantum physics has not changed since the 1970's. The major cause of this stagnation is that physics has changed, but physicists have not changed their methods. The standard model has not kept up to date with scientific advances" (Sabine Hossenfelder, theoretical physicist, Why the foundations of physics have not progressed for 40 years).

These quotes illustrate the conflict between the old standard model of subatomic particles and the rapid developments in contemporary science. The outdated model of particle physics is sending much research into dead ends and costly experiments that go nowhere. As astronomer Tony Coles says (Tank Magazine, issue 60), "Fundamental physics is at an impasse... it's the end of the road [for particle physics], or at least a fresh start is needed". This provides a perfect recipe for misguided concepts of particle physics to become pseudoscience in the classroom.

This subject is fully explored in the book '<u>Final Theory of Light & Finding Extraterrestrials</u>' published by <u>DeliveredOnline.com</u>. It provides a fundamental understanding of light as never before, thus ensuring you don't risk wasting years of dead-end studies and research. It is written for a general audience to enjoy, and will be of special interest to those involved in physics and science. The book is also published in Spanish: <u>Teoría Final de la Luz y Búsqueda de Extraterrestres</u>, and can be obtained from Amazon.com and other online booksellers.

Russell Eaton
DeliveredOnline.com
+593 98 772 4607
mailto@deliveredonline.com
Visit us on social media:

Χ

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.