

Art Colaianni article in LifeStyle, Sept. 2019 - excerpt

The 20th-century scientist who many herald as more significant than Einstein, but which the average person has likely never heard of. No, it's not Tesla.

Winston Churchhill is credited with saying that "history is written by the victors." Probably the greatest American historian – at least the most popular – Will Durant, said, "... history is a Mississippi of lies," and that "History is mostly guessing, the rest is prejudice."

Sometimes recent history misses the significance of people and actions until broader history recognizes it.

Such appears to be the case with the man who first began the ball rolling on a subject that has proven time and again to show that reality as we know it... isn't real. Quantum mechanics.

He was a conservative, sixth child from the south of Germany, who took singing lessons and played piano, organ, and cello, and composed songs. He almost began a career in <u>philology</u>, and his physics professor advised him against going into physics, saying, "in this field, almost everything is already discovered, and all that remains is to fill a few holes." Initially ignored by the academic community, he was happy to fill in some holes.

From this inauspicious beginning, in December 2000, some 700 physicists and historians gathered in Berlin to celebrate this man and his theory, the theory of which is still not understood as to its meaning but is the foundation of modern science.

In the fall of 1900, he began a mundane investigation into the relationship between light and matter. He succeeded in finding the right formula in what he called "an act of desperation," and "lucky intuition." At first, he considered it was only "a purely formal assumption ... actually I did not think much about it." This discovery came at the cost of relinquishing one of his own most cherished beliefs that the second law of thermodynamics was an absolute law of nature.

The radical implications of this work weren't appreciated until five years later when Albert Einstein recognized it in his <u>Special Theory of Relativity</u>.

He was among the few who immediately recognized the significance of Einstein's work, and he used his influence in the world of theoretical physics to ensure that the theory was soon widely accepted in Germany. Ironically, his work would go on to overturn much of Einstein's relativity model.

He and Einstein became close friends and met frequently to play music together.

From transistors, computer chips, lasers, CAT scans, PET scans, and M.R.I. machines, knowledgeable estimates say that this discovery has something to do with over fifty-percent of the products in the US. Leon Lederman, the former director of the Fermi National Accelerator Laboratory said if his discoveries stopped working, "...the <u>G.N.P.</u> would go to zero."

His discovery has come to be regarded as effectively the birth of <u>quantum</u> <u>physics</u>, and one of the greatest intellectual accomplishments of the 20<sup>th</sup> century.

It was in recognition of this accomplishment that he was awarded the Nobel Prize in Physics in 1918.

In 1948, the German scientific institution the <u>Kaiser Wilhelm Society</u> was renamed the <u>Max Planck Society</u> in honor of him.

As an interesting side note and comment on his character, he appealed directly to Hitler in an attempt to reverse Hitler's devastating racial policies.

Max Planck also said, "Science cannot solve the ultimate mystery of nature, for in the final analysis we ourselves are part of the mystery we are trying to solve."

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