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THE PHYSICS BEHIND NANOTECHNOLOGY & MATHEMATICAL MODELING

Abstract:

Experimental studies of infinite (unrestricted at least in one direction) quantum particle motion using probe nanotechnologies have revealed the necessity of revising previous concepts of their motion. Particularly, quantum particles transfer quantum motion nonlocality energy beside classical kinetic energy, in other words, they are in two different kinds of motion simultaneously. The quantum component of the motion energy may be quite considerable under certain circumstances. Some new effects were predicted and proved experimentally in terms of this phenomenon. A new prototype refrigerating device was tested, its principle of operation being based on the experimental studies of infinite (unrestricted at least in one direction) quantum particle motion using the effect of transferring the quantum component of the motion energy.

Biography

Christopher is an expert in Space Physics and Software Engineering, specializing in Telecommunications. He is a University Lecturer and Consultant, with research interests in Space Physics, Theoretical Physics, and Nanotechnology. He teaches courses such as Electrodynamics and Astrophysics and has numerous publications. His current research focuses on Nuclear Structure Properties and Space Nanotechnology. As a Backend Software Engineer, he has designed applications for banks and private firms. He leads a tech company partnering with major U.S. organizations. Dr. Christopher was the sole Nigerian speaker at the 2023 International Conference on Nuclear Structure Properties in Turkey. He has over 500 Google Scholar citations, was nominated for the Cambridge Sustainability Leadership Program in 2023, and won the Best Research Paper award from ISROSET in 2021.