

Download Clifford Algebras And Their Applications In Mathematical Physics

In mathematics, a Clifford algebra is an algebra generated by a vector space with a quadratic form, and is a unital associative algebra. As K -algebras, they generalize the real numbers, complex numbers, quaternions and several other hypercomplex number systems. The theory of Clifford algebras is intimately connected with the theory of quadratic forms and orthogonal transformations. David Olin Hestenes, Ph.D. (born May 21, 1933) is a theoretical physicist and science educator. He is best known as chief architect of geometric algebra as a unified language for mathematics and physics, and as founder of Modelling Instruction, a research-based program to reform K–12 Science, Technology, Engineering, and Mathematics (STEM) education. Description of the non-equilibrium effects in reactive gas mixtures constitutes a grand challenge in physical-chemical gas-dynamics. Such processes are of great interest for the fields such as plasma physics, aerospace engineering, astrophysics, chemical engineering, etc. The Journal of Physical Mathematics is one of the topmost and important peer-reviewed journals in the field of Theoretical Physics. It publishes high-quality scientific content related to physical mathematics and mathematical methods of physics.