

Abstract Submitted
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Twist ‘til we tear the house down: How Clifford solved the universe in 1870 JAMES BEICHLER, Semi-Retired — It is commonly believed that the first hyperspace theories in physics were developed in the early twentieth century - Kaluza’s five-dimensional extension of relativity is the best known, but this is untrue. It is also commonly believed that W.K. Clifford ‘speculated’ on a higher space in 1870, had no followers and never published his theory (if he even had one). Nothing could be further from the historical truth. As early as 1869, Clifford, his followers and students began to develop a physical theory of matter based on a three-dimensional space curved in four dimensions. Clifford began to publish his theory, but modern researchers have failed to recognize his theoretical work because they look for something like Einstein’s theory even though Clifford developed an electromagnetic theory. Clifford may not have directly influenced Einstein’s relativity, but he made plausible arguments for the reality of space curvature, rendering the rapid acceptance of Einstein’s concept of curved space-time more plausible. Clifford’s work is either largely ignored by historians, scientists and other scholars or considered irrelevant because the early work on hyperspaces has been associated with ether theories that were abandoned, utilized quaternion algebras that were replaced by vectors and tensors, and was unfortunately associated with spiritualism.

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