

Abstract Submitted
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Physical Locality in Pure Mathematics CHRISTOPHER GODFREY, Missouri Western State University — It has been suggested that the only proper way to express the laws of physics (specifically the laws of Quantum Mechanics) is using Geometric Algebra (Christian 2006, 2008, 2010). Thus far, physics has resisted most attempts at being recast in these terms. Here we show that the reason for this failure lies in the conflict between the peculiar relationship between position and direction in Geometric (or Clifford) Algebra (which is not part of standard algebraic representations), and classical mathematical physics. The implications of this conflict for Christian's Clifford Algebra based hidden variables theory are discussed.

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