

Abstract Submitted  
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**Quaternion Quantum Mechanics Demystified** DOUGLAS SWEETSER, none — Quaternion quantum field theory is introduced. The goal is for every equation that plays a role in quantum field theory gets rewritten using real-valued quaternions. Like the correspondence principle before it, the method is simple and systematic: keep 4- vectors together, drop factors of  $i$ , keep the constants, but make the expression dimensionless if possible. The differences between classical, relativistic and quantum mechanics equations are based on their constants and form. There may be enough time to derive the Schrodinger and Klein-Gordon equations. More current information is available at <http://visualphysics.org/preprints>.

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none

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