

Abstract Submitted
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Euclidean relativistic quantum mechanics I¹ WAYNE POLYZOU,
PHILIP KOPP, University of Iowa — We introduce a formulation of relativistic
quantum mechanics where the dynamical input is Euclidean generating functionals
or Green functions. We discuss how dynamical calculations can be performed in this
framework without analytic continuation. We discuss the structure of model gener-
ating functionals, the construction of the Hilbert space, the Poincaré Lie Algebra,
one particle eigenstates, and representations of finite Poincaré transformations.

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