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**Kevin C. Murphy\*** ([kcmurphy@math.uiowa.edu](mailto:kcmurphy@math.uiowa.edu)), 2890 Coral Court Apt. 201, Coralville, IA 52241. *Vacuum and Bound State Calculations in Point Form Quantum Field Theory.*

One of the ways of generating a Poincare covariant quantum field theory is to construct four-momentum and Lorentz generators that satisfy the commutation relations of the Poincare algebra. I show how to do this when the four-momentum operators carry interactions, and the Lorentz generators do not. Since the four-momentum operators commute among themselves, they can be used to generate vacuum and bound states as generalized eigenvectors. I will discuss the structure of Lorentz invariant equations whose solutions give the generalized eigenvectors. (Received September 16, 2008)