Extravariables in the BRST Quantization of Fermionic Systems

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ABSTRACT

In this paper, a new method of quantization for purely fermionic systems is presented. We shall prove that for such systems it is possible to replace the original second-class constrains with some first-class ones by adding fermionic extradegrees of freedom. The resulting one-parameter family of first-class systems is quantized in the Hamiltonian BRST formalism such that its corresponding path integral coincides with the one of the original system.