

where  $t \in [0, T]$ ,  $W_s = W(s, \omega)$  - Wiener process,  $\widetilde{\nu}_s(B) = \widetilde{\nu}(s \times B, \omega)$ ,  $B \subset \mathbb{R}$  - compensated stochastic Poisson measure. Measure  $\pi(B)$  is characteristic of measure  $\widetilde{\nu}_s(B)$ ,  $\pi(\mathbb{R}) < \infty$ . The main goal of this work is to propose new method of calculation of a value of a functional, which depends on solution of the equation above. The proposed method is based on so called weak approximation, which is exact for polynomials of third degree for Wiener process and compensated Poisson measure.

**Some consequences from the Dirac-Kaehler theory: on intrinsic spinor sub-structure of the different boson wave functions**

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Properties of tensors equivalent to a direct product of two different 4-spinors are investigated. It is shown that tensors obey additional 8 nonlinear restrictions, those are presented in Lorentz covariant form. In the context of the Dirac-Kaehler theory, such a property can be interpreted as follows: if one wishes to consider the the Dirac-Kaehler field as consisting of two 4-spinor fields, one must impose additional restrictions on tensors of the Dirac-Kaehler field the latter leads to a non-linear wave equation for a complex boson field (composed on the base of two 4-spinor fields). Instead, the use of four 4-spinor fields give possibility to construct the Dirac-Kaehler tensor set of 16 independent components. However, the formulas relating the Dirac-Kaehler boson to four fermion fields are completely different from those previously used in the literature. In explicit form, restrictions on four 4-spinor corresponding to separation of different simple boson with spin 0 or 1 and various intrinsic parities, are constructed.

**Bjorken sum rule analysis: revised**

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We update and extend results of our previous Bjorken sum rule analysis at low momentum transfers with the four-loop expression for the perturbative QCD correction. We study in detail asymptotic nature of the perturbative expansions in the region  $Q < 1$  GeV and extract information about QCD parameters.