Fermion-Boson Vertex at Finite Chemical Potential

ZONG Hong-Shi,[1,2,3] FENG Hong-Tao,[1] HOU Feng-Yao,[1] and SUN Wei-Min[1,2]

[1] Department of Physics, Nanjing University, Nanjing 210093, China
[2] Joint Center for Particle, Nuclear Physics and Cosmology, Nanjing 210093, China
[3] CCAST (World Laboratory), P.O. Box 8730, Beijing 100080, China

Abstract: Based on the Ward-Takahashi identity at finite chemical potential and Lorentz structure analysis, we generalize the Ball-Chiu vertex to the case of nonzero chemical potential and obtain the general form of the fermion-boson vertex in QED at finite chemical potential.

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