KEK Theory Meeting on Particle Physics Phenomenology (KEK-PH2018 winter) and 3rd KIAS-NCTS-KEK workshop on Particle Physics Phenomenology

Contribution ID: 78 Type: not specified

Non-Abelian Schwinger Pair Production in Topologically Non-Trivial Background Fields

Wednesday, 5 December 2018 15:00 (20 minutes)

Schwinger pair production is examined in SU(2) (SL(2,C)) background fields through the worldline instanton method, whose non-Abelian equivalent stems from Wong's equations. The role of group complexification for pair production in non-Abelian fields is elucidated. The gauge group winding number is compared and contrasted with the worldline instanton winding number, related to number of produced pairs, for special topologically non-trivial background gauge configurations.

Presenter: COPINGER, Patrick (Tokyo University)

Session Classification: Poster Session & Tea Break