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Fermion Determinant with Dynamical Chiral Symmetry Breaking

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Abstract: One-loop fermion determinant is discussed for the case in which the dynamical chiral symmetry breaking caused by momentum-dependent fermion self-energy $\Sigma(p^2)$ takes place. The obtained series generalizes the heat kernel expansion for hard fermion mass.

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Key words: determinant, dynamical symmetry breaking, heat kernel

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