# Index Formulas for Generalized Wiener–Hopf Operators and Boson–Fermion Correspondence in 2$N$ Dimensions

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**Abstract.** The kernels of operators associated with special chiral gauge transformations ('kinks') in the 2$N$-dimensional Dirac theory are explicitly determined. The result is used to obtain index formulas for Fredholm operators corresponding to continuous chiral gauge transformations. Moreover, the Fock space quadratic forms corresponding to the kinks are proved to converge to the Dirac field as the kink size goes to zero. It is also shown that for $N \equiv 1, 2 \pmod 4$ the Majorana field can be reached in a similar fashion.

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