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Discrete symmetries in quantum electrodynamics with electric and magnetic sources

QED with magnetic monopoles gives Maxwell's equations with dual symmetry and leads to the quantization of electric charge. However the transformation of parity P and time inversion T are no longer the symmetries of theory. Also the CP transformation is broken. The symmetry is restored for PT and CPT transformations . These conclusions follow from the classical Maxwell's equations and the quantum field analysis leading to the 2-point Wightman functions in Zwanziger's model of QED.

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