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Autore	Feldman Joel S
Titolo	“QED A Proof of Renormalizability” [[electronic resource] /] / by Joel S. Feldman, Thomas R. Hurd, Lon Rosen, Jill D. Wright
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Nota di contenuto	The GN tree expansion and UV-renormalization -- Loop regularization -- Ward identities -- The limits ? ? ? and U ? ? -- The tree expansion in the infrared regime -- QED without cutoffs -- Local borel summability.
Sommario/riassunto	The authors give a detailed and pedagogically well written proof of the renormalizability of quantum electrodynamics in four dimensions. The proof is based on the free expansion of Gallavotti and Nicolò and is mathematically rigorous as well as impressively general. It applies to rather general models of quantum field theory including models with infrared or ultraviolet singularities, as shown in this monograph for the first time. Also discussed are the loop regularization for renormalized graphs and the Ward identities. The authors also establish that in QED in four dimensions only gauge invariant counterterms are required. This seems to be the first proof which will be accessible not only to the expert but also to the student.