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Altri autori (Persone)	Schulte-FrohlindeVerena
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Definition of [phi]4-Theory; Feynman Diagrams; Diagrams in Momentum Space; Structural Properties of Perturbation Theory; Diagrams for Multicomponent Fields; Scale Transformations of Fields and Correlation Functions; Regularization of Feynman Integrals; Renormalization; Renormalization Group; Recursive Subtraction of UV-Divergences via R-Operation; Zero-Mass Approach to Counterterms; Calculation of Momentum Space Integrals; Generation of Diagrams; Results of the Five-Loop Calculation; Basic Resummation Theory; Critical Exponents of O(N)-Symmetric Theory; Cubic Anisotropy; Variational Perturbation Theory; Critical Exponents from Other Expansions; New Resummation Algorithm; Conclusion: Diagrammatic R-Operation Up to Five Loops; Contributions to Renormalization-Constants.
Sommario/riassunto	This work explains in detail how to perform perturbation expansions in quantum field theory to high orders, and how to extract the critical properties of the theory from the resulting divergent power series.