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Titolo	Elliptic Integrals, Elliptic Functions and Modular Forms in Quantum Field Theory // edited by Johannes Blümlein, Carsten Schneider, Peter Paule
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Collana	Texts & Monographs in Symbolic Computation, A Series of the Research Institute for Symbolic Computation, Johannes Kepler University, Linz, Austria, , 0943-853X
Disciplina	515.983
Soggetti	Computer science—Mathematics Quantum field theory String theory Mathematical physics Symbolic and Algebraic Manipulation Quantum Field Theories, String Theory Mathematical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Graph complexes and Cutkosky rules -- Differential equations and dispersion relations for Feynman amplitudes with elliptic functions -- Elliptic integrals and the two-loop ttbar production in QCD -- Solutions of 2nd and 3rd order differential equations with more singularities -- Analytic continuation of Feynman diagrams with elliptic solutions -- Twisted elliptic multiple zeta values and non-planar one-loop open-string amplitudes -- Genus one superstring amplitudes and modular forms -- Difference field methods in Feynman diagram calculations -- Feynman integrals and iterated integrals of modular forms -- Iterated elliptic and hypergeometric integrals for Feynman diagrams. - Feynman integrals, L-series and Kloosterman moments.
Sommario/riassunto	This book includes review articles in the field of elliptic integrals, elliptic functions and modular forms intending to foster the discussion between theoretical physicists working on higher loop calculations and

mathematicians working in the field of modular forms and functions
and analytic solutions of higher order differential and difference
equations. .
