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Collana	Contemporary mathematics ; ; volume 539
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Formato	Materiale a stampa
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Contents""; ""Preface""; ""List of participants""; ""One-particle irreducibility with initial correlations""; ""Multiple zeta values and periods: From moduli spaces to Feynman integrals""; ""From quantum electrodynamics to posets of planar binary trees""; ""Sweedler's duals and Schutzenberger's calculus""; ""Primitive elements of the Hopf algebra of free quasi-symmetric functions""; ""A Renormalisation Group approach to Stochastic Loewner Evolutions""; ""On the causal gauge principle""; ""1. Introduction""; ""2. Overview of the CGI method""; ""3. The abelian model""; ""4. Three MVBs"" ""5. The Weinberga€?Salam model within CGI""""6. Discussion""; ""References""; ""Abstract integration, combinatorics of trees and differential equations""; ""Rooted trees appearing in products and co-products""; ""Magnus expansions and beyond""; ""Wilsonian renormalization, differential equations and Hopf algebras""; ""1. Introduction""; ""2. Basics of wilsonian renormalization""; ""3. Rooted trees and power series of non linear operators""; ""4. Renormalization,

effective actions and Feynman diagrams""; ""5. Conclusion and outlook""; ""Acknowledgements""; ""References""
""Algebraic analysis of non-renormalization theorems in supersymmetric field theories""""""Not so non-renormalizable gravity"";
""Renormalised multiple zeta values which respect quasi-shuffle relations""; ""Formulas for the Connesa€?Moscovici Hopf algebra"";
""Hopf algebras and the combinatorics of connected graphs in quantum field theory""; ""Hopf Algebras of Formal Diffeomorphisms and Numerical Integration on Manifolds""; ""A combinatorial and field theoretic path to quantum gravity: The new challenges of group field theory""
""Noncommutative formal Taylor expansions and second quantised regularised traces""""""Motives: An introductory survey for physicists"";
""1. Introduction""; ""2. The Grothendieck ring""; ""3. The Tannakian formalism""; ""4. Weil cohomology""; ""5. Classical motives""; ""6. Mixed motives""; ""7. Motivic measures and zeta functions""; ""Appendix A. Motivic ideas in physics (by M.Marcolli)""; ""References"";
""Combinatorics and Feynman graphs for gauge theories""; ""Multi-scale Analysis and Non-commutative Field Theory""