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Nota di contenuto	Part I The Elementary Theory of Simplicial and Dendroidal Sets 1 Operads 2 Simplicial Sets 3 Dendroidal Sets 4 Tensor Products of Dendroidal Sets 5 Kan Conditions for Simplicial Sets 6 Kan Conditions for Dendroidal Sets Part II The Homotopy Theory of Simplicial and Dendroidal Sets 7 Model Categories 8 Model Structures on the Category of Simplicial Sets 9 Three Model Structures on the Category of Dendroidal Sets Part III The Homotopy Theory of Simplicial and Dendroidal Spaces 10 Reedy Categories and Diagrams of Spaces 11 Mapping Spaces and Bousfield Localizations 12 Dendroidal Spaces and -Operads 13 Left Fibrations and the Covariant Model Structure 14 Simplicial Operads and -Operads Epilogue References Index
Sommario/riassunto	This open access book offers a self-contained introduction to the homotopy theory of simplicial and dendroidal sets and spaces. These are essential for the study of categories, operads, and algebraic structure up to coherent homotopy. The dendroidal theory combines the combinatorics of trees with the theory of Quillen model categories. Dendroidal sets are a natural generalization of simplicial sets from the point of view of operads. In this book, the simplicial approach to higher category theory is generalized to a dendroidal approach to higher operad theory. This dendroidal theory of higher operads is carefully

developed in this book. The book also provides an original account of the more established simplicial approach to infinity-categories, which is developed in parallel to the dendroidal theory to emphasize the similarities and differences. *Simplicial and Dendroidal Homotopy Theory* is a complete introduction, carefully written with the beginning researcher in mind and ideally suited for seminars and courses. It can also be used as a standalone introduction to simplicial homotopy theory and to the theory of infinity-categories, or a standalone introduction to the theory of Quillen model categories and Bousfield localization.
