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Nota di contenuto	Physical Models of Plant Morphogenesis -- Fluid Transport in Plants -- Modelling Ion Channels -- Modelling the Plant Microtubule Cytoskeleton -- Bridging Scales from Protein Function to Whole-plant Water Relations with the OnGuard Platform -- Single-cell Approaches for Understanding Morphogenesis Using Computational Morphodynamics -- Modeling Plant Tissue Growth and Cell Division -- Modeling Plant Development with L-systems -- Flowering Time as a Model Trait to Bridge Proximate and Evolutionary Questions -- All but Sleeping? Consequences of Soil Seed Banks on Neutral and Selective Diversity in Plant Species.
Sommario/riassunto	Progress in plant biology relies on the quantification, analysis and mathematical modeling of data over different time and length scales. This book describes common mathematical and computational approaches as well as some carefully chosen case studies that demonstrate the use of these techniques to solve problems at the

forefront of plant biology. Each chapter is written by an expert in field with the goal of conveying concepts whilst at the same time providing sufficient background and links to available software for readers to rapidly build their own models and run their own simulations. This book is aimed at postgraduate students and researchers working the field of plant systems biology and synthetic biology, but will also be a useful reference for anyone wanting to get into quantitative plant biology.