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Sommario/riassunto	This book presents version 1.0 of the new Computer Algebra System OSCAR. Written in Julia, OSCAR builds on and vastly extends four cornerstone systems: ANTIC for number theory,GAP for group and representation theory, polymake for polyhedral and tropical geometry, and Singular for commutative algebra and algebraic geometry. It offers powerful computational tools that transcend the boundaries of the individual disciplines involved. It is freely available, open source software. The book is an invitation to use OSCAR. With discussions of theoretical and algorithmic aspects included, it offers a multitude of explicit code snippets. These are valuable for interested researchers from graduate students through established experts.