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Sommario/riassunto	This book gives a comprehensive treatment of the Grassmannian varieties and their Schubert subvarieties, focusing on the geometric and representation-theoretic aspects of Grassmannian varieties. Research of Grassmannian varieties is centered at the crossroads of commutative algebra, algebraic geometry, representation theory, and combinatorics. Therefore, this text uniquely presents an exciting playing field for graduate students and researchers in mathematics, physics, and computer science, to expand their knowledge in the field of algebraic geometry. The standard monomial theory (SMT) for the Grassmannian

varieties and their Schubert subvarieties are introduced and the text presents some important applications of SMT including the Cohen–Macaulay property, normality, unique factoriality, Gorenstein property, singular loci of Schubert varieties, toric degenerations of Schubert varieties, and the relationship between Schubert varieties and classical invariant theory. This text would serve well as a reference book for a graduate work on Grassmannian varieties and would be an excellent supplementary text for several courses including those in geometry of spherical varieties, Schubert varieties, advanced topics in geometric and differential topology, representation theory of compact and reductive groups, Lie theory, toric varieties, geometric representation theory, and singularity theory. The reader should have some familiarity with commutative algebra and algebraic geometry.