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Autore	Levitt N (Norman), <1943->
Titolo	Grassmannians and Gauss maps in piecewise-linear topology // Norman Levitt
Pubbl/distr/stampa	Berlin, Germany ; ; New York, New York : , : Springer-Verlag, , [1989] ©1989
ISBN	3-540-46078-0
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Descrizione fisica	1 online resource (V, 203 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1366
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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Local formulae for characteristic classes -- Formal links and the PL grassmannian $G_{n,k}$ -- Some variations of the $G_{n,k}$ construction -- The immersion theorem for subcomplexes of $G_{n,k}$ -- Immersions equivariant with respect to orthogonal actions on $R^{n+k}$ -- Immersions into triangulated manifolds (with R. Mladineo) -- The grassmannian for piecewise smooth immersions -- Some applications to smoothing theory -- Equivariant piecewise differentiable immersions -- Piecewise differentiable immersions into riemannian manifolds.
Sommario/riassunto	The book explores the possibility of extending the notions of "Grassmannian" and "Gauss map" to the PL category. They are distinguished from "classifying space" and "classifying map" which are essentially homotopy-theoretic notions. The analogs of Grassmannian and Gauss map defined incorporate geometric and combinatorial information. Principal applications involve characteristic class theory, smoothing theory, and the existence of immersion satifying certain geometric criteria, e.g. curvature conditions. The book assumes knowledge of basic differential topology and bundle theory, including Hirsch-Gromov-Phillips theory, as well as the analogous theories for the PL category. The work should be of interest to mathematicians concerned with geometric topology, PL and PD aspects of differential

geometry and the geometry of polyhedra.

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