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Autore	Waldhausen Friedhelm <1938->
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Sommario/riassunto	Since its introduction by Friedhelm Waldhausen in the 1970's, the algebraic K-theory of spaces has been recognized as the main tool for studying parametrized phenomena in the theory of manifolds. However, a full proof of the equivalence relating the two areas has not appeared until now. This book presents such a proof, essentially completing Waldhausen's program from more than thirty years ago. The main result is a stable parametrized h-cobordism theorem, derived from a homotopy equivalence between a space of PL h-cobordisms on a space X and the classifying space of a category of simple maps of spaces having X as deformation retract. The smooth and topological results then follow by smoothing and triangulation theory. The proof has two main parts. The essence of the first part is a "desingularization," improving arbitrary finite simplicial sets to polyhedra. The second part compares polyhedra with PL manifolds by a thickening procedure. Many of the techniques and results developed should be useful in other connections.