

1. Record Nr.	UNISA996466533303316
Titolo	Elliptic curves and modular forms in algebraic topology : proceedings of a conference held at the Institute for Advanced Study, Princeton, Sept. 15-17, 1986 // P. S. Landweber (editor)
Pubbl/distr/stampa	Berlin : , : Springer-Verlag, , [1988] ©1988
ISBN	3-540-39300-5
Edizione	[1st ed. 1988.]
Descrizione fisica	1 online resource (VIII, 232 p.)
Collana	Lecture notes in mathematics ; ; 1326
Disciplina	514.2
Soggetti	Algebraic topology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Elliptic genera: An introductory overview -- Elliptic formal groups over \mathbb{F}_p and \mathbb{F}_p in applications to number theory, computer science and topology -- Elliptic cohomology and modular forms -- Supersingular elliptic curves and congruences for Legendre polynomials -- Some Weil group representations motivated by algebraic topology -- Genres elliptiques équivariants -- Complex cobordism theory for number theorists -- Dirichlet series and homology theory -- Constrained Hamiltonians an introduction to homological algebra in field theoretical physics -- The index of the Dirac operator in loop space -- Jacobi quartics, Legendre polynomials and formal groups -- Note on the Landweber-Stong elliptic genus.
Sommario/riassunto	A small conference was held in September 1986 to discuss new applications of elliptic functions and modular forms in algebraic topology, which had led to the introduction of elliptic genera and elliptic cohomology. The resulting papers range from these topics through to quantum field theory, with considerable attention to formal groups, homology and cohomology theories, and circle actions on spin manifolds. Ed. Witten's rich article on the index of the Dirac operator in loop space presents a mathematical treatment of his interpretation of elliptic genera in terms of quantum field theory. A short introductory article gives an account of the growth of this area prior to the conference.

