

1. Record Nr.	UNINA9910865264003321
Autore	Bahri Abbas
Titolo	Toric Topology and Polyhedral Products // edited by Anthony Bahri, Lisa Jeffrey, Taras Panov, Donald Stanley, Stephen Theriault
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031572043 9783031572036
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (325 pages)
Collana	Fields Institute Communications, , 2194-1564 ; ; 89
Altri autori (Persone)	JeffreyLisa C. <1965-> PanovTaras E. <1975-> StanleyDonald <1966-> TheriaultStephen <1969->
Disciplina	514.2
Soggetti	Algebraic topology Manifolds (Mathematics) Geometry, Algebraic Commutative algebra Commutative rings Global analysis (Mathematics) Algebraic Topology Manifolds and Cell Complexes Algebraic Geometry Commutative Rings and Algebras Global Analysis and Analysis on Manifolds
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Connected sums of sphere products and minimally non-Golod complexes -- Toric manifolds over 3-polytopes -- Symmetric products and a Cartan-type formula for polyhedral products -- Multiparameter persistent homology via generalized Morse theory -- Compact torus action on the complex Grassmann manifolds -- On the enumeration of Fano Bott manifolds -- Dga models for moment-angle complexes -- Duality in toric topology -- Bundles over connected sums -- The SO(4) Verlinde formula using real polarizations -- GKM graph

locally modelled by $T^n \times S^1$ -action on T^*C_n and its graph equivariant cohomology -- On the genera of moment-angle manifolds associated to dual-neighborly polytopes: combinatorial formulas and sequences -- Homeomorphic model for the polyhedral smash product of disks and spheres -- Invariance of polarization induced by symplectomorphisms -- Polyhedral products for wheel graphs and their generalizations -- On the cohomology ring of real moment-angle complexes.

Sommario/riassunto

This book explores toric topology, polyhedral products and related mathematics from a wide range of perspectives, collectively giving an overview of the potential of the areas while contributing original research to drive the subject forward in interesting new directions. Contributions to this volume were written in connection to the thematic program Toric Topology and Polyhedral Products held at the Fields Institute from January-June 2020. 16 original contributions were inspired or influenced by the program. Toric Topology arose as a subject in its own right about twenty-five years ago. It sits at the intersection of commutative algebra, topology, combinatorics, algebraic geometry, and symplectic and convex geometry. Polyhedral products are a functorial generalization of a construction that is at the centre of Toric Topology. They are of independent interest and unify several constructions that arise in a diverse range of areas, such as geometric group theory, homotopy theory, algebraic combinatorics and subspace arrangements.
