1.	Record Nr.	UNINA9910793168103321
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	Titolo	Intersection cohomology, simplicial blow-up and rational homotopy / / David Chataur, Martintxo Saralegi-Aranguren, Daniel Tanre
	Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2018
	ISBN	1-4704-4744-4
	Descrizione fisica	1 online resource (122 pages)
	Collana	Memoirs of the American Mathematical Society ; ; Volume 254, Number 1214
	Disciplina	514.23
	Soggetti	Intersection homology theory
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Simplicial blow-up and intersection-cohomology -- Rational algebraic models -- Formality and examples.
	Sommario/riassunto	"Let X be a pseudomanifold. In this text, we use a simplicial blow-up to define a cochain complex whose cohomology with coefficients in a field, is isomorphic to the intersection cohomology of X, introduced by M. Goresky and R. MacPherson. We do it simplicially in the setting of a filtered version of face sets, also called simplicial sets without degeneracies, in the sense of C.P. Rourke and B.J. Sanderson. We define perverse local systems over filtered face sets and intersection cohomology with coefficients in a perverse local system. In particular, as announced above when X is a pseudomanifold, we get a perverse local system of cochains quasi-isomorphic to the intersection cochains of Goresky and MacPherson, over a field. We show also that these two complexes of cochains are quasi-isomorphic to a filtered version of Sullivan's differential forms over the field Q. In a second step, we use these forms to extend Sullivan's presentation of rational homotopy type to intersection cohomology. For that, we construct a functor from the category of filtered face sets to a category of perverse commutative differential graded Q-algebras (CDGA's) due to Hovey. We establish also the existence and uniqueness of a positively graded, minimal model of some perverse CDGA's, including the perverse forms over a filtered face set and their intersection cohomology. Finally, we prove the topological invariance of the minimal model of a PL-

pseudomanifold whose regular part is connected, and this theory creates new topological invariants. This point of view brings a definition of formality in the intersection setting and examples are given. In particular, we show that any nodal hypersurface in CP(4), is intersection-formal"--