1.	Record Nr.	UNINA9910779006003321
	Titolo	Harmony of Grobner bases and the modern industrial society [[electronic resource]] : the second CREST-SBM International Conference, Osaka, Japan, 28 June-2 July 2010 / / editor, Takayuki Hibi
	Pubbl/distr/stampa	Singapore, : World Scientific Pub. Co., 2012
	ISBN	1-280-66987-X
		9786613646804
		981-4383-46-5
	Descrizione fisica	1 online resource (385 p.)
	Altri autori (Persone)	HibiTakayuki
	Disciplina	512.44
	Soggetti	Grobner bases
		Developed countries Congresses
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Preface; CONTENTS; Multidegree for Bifiltered D-modules and Hypergeometric Systems R. Arcadias; Introduction; 1. Bifiltered free resolution of D-modules; 2. Multidegree for bifiltered D-modules; 3. Examples from the theory of hypergeometric systems; 3.1. V -filtration along the origin; 3.2. V -filtration along coordinate hyperplanes; 3.3. Dependency of the multidegree on the parameters; 3.4. Positivity; 4. Proof of Theorem 2.1; Acknowledgements; References; Desingularization Algorithms: A Comparison from the Practical Point of View R. Blanco and A. Fruhbis-Kruger; 1. Introduction
		2. Algorithms re.ning Hironaka's approach in the general case3. Combinatorial algorithms for the binomial case; 4. Algorithmic resolution in low dimensions; 4.1. Resolution of surfaces by Jung's approach; 4.2. Beyond the geometric case: Lipman's construction for two dimensional schemes; 5. Comparisons and timings; Acknowledgments; References; Computing Localizations Iteratively F. J. Castro-Jimenez and A. Leykin; Introduction; 1. Preliminaries; 1.1. Weyl algebra; 1.2. Grobner bases; 1.3. Holonomic D-modules; 2. Iterative algorithm; 2.1. Iterative approach; 2.2. Stopping criterion
		2.3. Annihilator order of a planar curve3. Discussion and open problems; 3.1. Isolated hypersurface singularities; 3.2. Weyl closure; 4.

Acknowledgements; References; KNOPPIX/Math: A Live System for Mathematics T. Hamada and KNOPPIX/Math Committers; 1. Introduction; 2. History; 3. The objectives of KNOPPIX/Math; 4. How to boot KNOPPIX/Math; References; Running Markov Chain without Markov Basis H. Hara, S. Aoki and A. Takemura; 1. Introduction; 2. Markov basis and lattice basis; 3. Sampling contingency tables with a lattice basis; 3.1. Generating moves by using a lattice basis

3.2. A lattice basis for higher Lawrence configuration4. Numerical experiments; 4.1. No-three-factor interaction model; 4.2. Discrete logistic regression model; References; Degree Bounds for a Minimal Markov Basis for the Threestate Toric Homogeneous Markov Chain Model D. Haws, A. Martn del Campo and R. Yoshida; 1. Introduction; 2. Notation; 2.1. Model (a); 2.2. Model (b); 2.3. Model (c); 2.4. Model (d); 2.5. Sufficient statistics, ideals, and Markov basis; 2.6. State graph; 3. Smith Normal Form; 4. Semigroup; 4.1. Model (a); 4.2. Model (b); 4.3. Model (c); 4.4. Model (d)

5. Polytope Structure6. Computational Results; 7. Conclusions and Open Problems; Appendix A. Supporting Hyperplanes; References; First Steps toward the Geometry of Cophylogeny P. Huggins, M. Owen and R. Yoshida; 1. Introduction; 2. Spaces of cophylogenetic trees; 3. Cophylogenetic reconstruction; 3.1. Retraction onto spaces of cophylogenetic trees; 3.2. Balanced minimum coevolution; 4. Cophylogenetic invariants; 5. Open problems; 6. Proof of Theorem 2.2; Acknowledgements; References

Cones of Elementary Imsets and Supermodular Functions: A Review and Some New Results T. Kashimura, T. Sei, A. Takemura and K. Tanaka

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Sommario/riassunto

This volume consists of research papers and expository survey articles presented by the invited speakers of the conference on "Harmony of Grobner Bases and the Modern Industrial Society". Topics include computational commutative algebra, algebraic statistics, algorithms of D-modules and combinatorics. This volume also provides current trends on Grobner bases and will stimulate further development of many research areas surrounding Grobner bases.