

Biblioteca Matemática

Boletim de Divulgação Bibliográfica

Abril 2012

Monografias

1. Japanese lesson study in mathematics: its impact, diversity and potential for educational improvement / editors, Masami Isoda ... [et al.] ; with support of Shizumi Shimizu ... [et al.].

Hackensack, N.J. : World Scientific, c2007. XXVII, 251 p. : il.

Assuntos: Matemática -- Estudo e Ensino -- Japão./ Matemática -- Formação de professores -- Japão./ Matemática -- Estudo e ensino -- Pesquisa -- Japão./ Mathematics -- Study and teaching -- Japan./ Lesson planning -- Japan./ Effective teaching./ Mathematics teachers -- Training of -- Japan./ Mathematics -- Study and teaching -- Research -- Japan

Cota: 00A35/Jap

2. International Congress of Mathematicians, Berlin, 1998.

Proceedings of the International Congress of Mathematicians : Berlin, 1998, August 18-27.

[Bielefeld : Deutsche Mathematiker-Vereinigung], 1998.

3 vol.

Bibliografia. - Índice de autor.

Contém: Vol. I: Plenary lectures and ceremonies. - 662 p. - il. - Vol. II: Invited lectures. - 881 p. - il. - Vol. III: 825 p. - il.

Assunto: Matemática -- Congressos

Cota: 00B25/INT.Pro.1998/V. 1

00B25/INT.Pro.1998/V. 2

00B25/INT.Pro.1998/V. 3

3. Andersen, Kirsti

Brook Taylor's work on linear perspective : a study of Taylor's role in the history of perspective geometry. including facsimiles of Taylor's two books on perspective / Kirsti Andersen.

New York : Springer-Verlag, c1992. X, 259 p. : il. Sources in the history of mathematics and physical sciences ; 10.

Bibliografia: p. [249]-256. - Índice: p. [257]-259.

Inclui fac-símiles de duas reimpressões de dois livros de Taylor Brooks sobre perspectiva: Linear prespective. Originalmente publicado: London, imp. por R. Knaplock, 1715. - New principles of linear perspective. Originalmente publicado: London, imp. por R. Knaplock, 1719.

Assuntos: Perspectiva -- até 1800./ Perspective -- Early works to 1800

Cota: 01A50/AND.

4. Mohar, Bojan, 1956-

Graphs on surfaces / Bojan Mohar and Carsten Thomassen.

Baltimore : Johns Hopkins University Press, c2001. XI, 291 p. : il. Johns Hopkins studies in the mathematical sciences.

Bibliografia: p. 265-281. - Índice: p. 283-291.

Assuntos: Teoria dos grafos./ Superfícies./ Graph theory./ Surfaces

Cota: 05C/BOJ

5. Geroldinger, Alfred

Combinatorial number theory and additive group theory / Alfred Geroldinger, Imre Z. Ruzsa.

Basel ; Boston : Birkhauser, c2009. XI, 330 p. : il. Advanced courses in mathematics, CRM Barcelona.

Bibliografia.

Contém: I. Additive Group Theory and Non-unique Factorizations / Alfred Geroldinger -- 1. Basic concepts of non-unique factorizations -- 2. The Davenport constant and first precise arithmetical results -- 3. The structure of sets of lengths -- 4. Addition theorems and direct zero-sum problems -- 5. Inverse zero-sum problems and arithmetical consequences -- II. Sumsets and Structure / Imre Z. Ruzsa -- 1. Cardinality inequalities -- 2. Structure of sets with few sums -- 3. Location and sumsets -- 4. Density -- 5. Measure and topology --

III. Thematic seminars -- 1. A survey on additive and multiplicative decompositions of sumsets and of shifted sets / Christian Elsholtz -- 2. On the detailed structure of sets with small additive property / Gregory A. Freiman -- 3. The isoperimetric method / Yahya O. Hamidoune -- 4. Additive structure of difference sets / Norbert Hegyvari -- 5. The polynomial method in additive combinatorics / Gyula Karolyi -- 6. Problems in additive number theory, III / Melvyn B. Nathanson -- 7. Incidences and the spectra of graphs / Jozsef Solymosi -- 8. Multi-dimensional inverse additive problems / Yonutz V. Stanchescu.

Assuntos: Teoria dos números./ Combinatória./ Combinatorial number theory./ Additive combinatorics.

Cota: 11-06/GER

6. **Brézis, Haim.**

Functional analysis, Sobolev spaces and partial differential equations / Haim Brezis.

New York : Springer, 2011. XIII, 599 p. : il. Universitext.

Bibliografia: p. 585-594. - Índice: p. 595-599.

Assuntos: Análise funcional./ Espaços de Sobolev./ Equações diferenciais parciais./ Functional analysis./ Sobolev spaces./ Differential equations, Partial

Cota: 35-01/BRE

7. **DiBenedetto, Emmanuele**

Harnack's inequality for degenerate and singular parabolic equations / Emmanuele DiBenedetto, Ugo Gianazza, Vincenzo Vespri.

New York : Springer, c2012. XIII, 278 p. : il. Springer monographs in mathematics.

Bibliografia: p. 269-276. - Índice: p.277-278.

Contém: Introduction -- Preliminaries -- Degenerate and singular parabolic equations -- Expansion of positivity -- The Harnack inequality for degenerate equations -- The Harnack inequality for singular equations -- Homogeneous monotone singular equations.

Assuntos: Equações diferenciais parabólicas./ Desigualdades./ Differential equations, Parabolic./ Inequalities (Mathematics)

Cota: 35-02/DIB

8. Topics in symbolic dynamics and applications / edited by F. Blanchard, A. Maass, A. Nogueira.

Cambridge, UK ; New York : Cambridge University Press, 2000. XVI, 245 p. : il.
London Mathematical Society lecture note series ; 279.

Assuntos: Dinâmica simbólica./ Symbolic dynamics

Cota: 37-06/Top

9. Open problems in topology II / edited by Elliott Pearl.

Amsterdam ; Boston : Elsevier, 2007. XI, 763 p. : il.
Referências bibliográficas. - Índice: p. 751-763.

Assunto: Topology

Cota: 54-06/Ope, II

10. **Chan, Ngai Hang.**

Time series : applications to finance with R and S-Plus / Ngai Hang Chan.

Hoboken, N.J. : Wiley, c2010. XXIII, 296 p. : il.

Sumário: "This book is designed to help readers grasp the conceptual underpinnings of time series modeling in order to gain a deeper understanding of the ever-changing dynamics of the financial world. It covers theory and application equally for readers from both financial and mathematical backgrounds. The book offers succinct coverage of standard topics in statistical time series - such as forecasting and spectral analysis - in a manner that is both technical and conceptual. Recent developments in nonstandard time series techniques such as Bayesian methods and arbitrage statistics have been added to this edition, and they are illustrated in detail with real financial examples. Subroutines in R and S-Plus are lavishly displayed throughout in this new edition. An author website provides instructor notations and additional software subroutines, as well as complete solutions to the exercises in the text."
Bibliografia: p. 283-289. - Índice: p. 291-293.

Assuntos: Séries temporais -- Análise./ Econometria./ Gestão de riscos./ Time-series analysis./ Econometrics./ Risk management

Cota: 62-01/CHA.Tim

11. Montgomery, Douglas C.

Introduction to time series analysis and forecasting / Douglas C. Montgomery, Cheryl L. Jennings, Murat Kulahci.

Hoboken, N.J. : Wiley-Interscience, c2008. XI, 445 p. : il. Wiley series in probability and statistics.

Bibliografia: p. 437-441. - Índice: p. 443-445.

Assuntos: Séries temporais -- Análise./ Previsão -- Matemática./ Time-series analysis./ Forecasting.

Cota: 62-01/MON.Tim

12. Pepe, Margaret Sullivan

The statistical evaluation of medical tests for classification and prediction / Margaret Sullivan Pepe.

Oxford : Oxford University Press, 2004. XVI, 302 p. : il. Oxford Statistical Science Series ; 31.

Assuntos: Estatística médica./ Diagnóstico -- métodos estatísticos.

Cota: 62-02/PEP

13. A course in time series analysis / edited by Daniel Peña, George C. Tiao, Ruey S. Tsay.

New York : J. Wiley, c2001. XVII, 460 p. : il. Wiley series in probability and statistics.

Bibliografia.

Assuntos: Séries temporais -- Análise./ Time-series analysis.

Descrição do editor : <http://www.loc.gov/catdir/enhancements/fy0824/2006927110-d.html>

Índice analítico : <http://www.loc.gov/catdir/enhancements/fy0824/2006927110-t.html>

Cota: 62M/PEN

14. Tsay, Ruey S., 1951-

Analysis of financial time series / Ruey S. Tsay.

Cambridge, Mass. : Wiley, c2010. XXIII, 677 p. : il. Wiley series in probability and statistics.

Bibliografia. - Índice: p. 673-677.

Contém: Financial time series and their characteristics -- Linear time series -- Volatility models -- Nonlinear models and their applications.

Assuntos: Séries temporais -- Análise./ Econometria./ Gestão de riscos./ Time-series analysis./ Econometrics./ Risk management.

Cota: 62P/TSA

15. Kelley, C. T.

Implicit filtering / C. T. Kelley.

Philadelphia : Society for Industrial and Applied Mathematics, 2011. XIII, 170 p. : il. Software, environments, and tools ; 23.

Bibliografia: p. 157-166. - Índice: p. 167-170.

Contém: Implicit filtering is a way to solve bound-constrained optimization problems for which derivative information is not available. Unlike methods that use interpolation to reconstruct the function and its higher derivatives, implicit filtering builds upon coordinate search and then interpolates to get an approximation of the gradient. Implicit Filtering describes the algorithm, its convergence theory and a new MATLAB(r) implementation. It is unique for being the only book in the area of derivative-free or sampling methods to be accompanied by publicly available software. It includes an overview of recent results on optimization of noisy functions, including results that depend on non-smooth analysis and results on the handling of constraints. This book is for graduate students who want to learn about this technology, scientists and engineers who wish to apply the methods to their problems and specialists who will use the ideas and the software from this book in their own research.

Assuntos: Engenharia industrial -- Matemática./ Filtros -- Matemática./ Teoria da previsão./ Industrial engineering -- Mathematics./ Filters (Mathematics)./ Prediction theory.

Cota: 65-02/KEL

16. Borzái, Alfio

Computational optimization of systems governed by partial differential equations / Alfio Borzái, Volker Schulz.

Philadelphia : Society for Industrial and Applied Mathematics, c2012. XX, 282 p. : ill. (alg. color.). Computational science and engineering series. Bibliografia: p. 255-279. - Índice: p. 281-282.

Assuntos: Optimização matemática./ Equações diferenciais parciais./ Mathematical optimization./ Differential equations, Partial.

Cota: 65K/BOR

17. Tao, Renji

Finite automata and application to cryptography / Renji Tao.

New York, NY : Springer-Verlag Berlin Heidelberg : Tsinghua University Press, 2008. IX, 406 p. : il. Bibliografia: p. [395]-402. - Índice: p. [403]-406.

Sumário: Finite automata are regarded as a natural model for ciphers. This book deals with the invertibility theory of finite automata and its application to cryptography. It discusses autonomous finite automata and Latin arrays, which are relative to the canonical form for one-key cryptosystems based on finite automata.

Assuntos: Criptografia./ Sequential machine theory./ Cryptography.

Cota: 68P/TAO

18. Viegas, Antonio dos Santos, 1837-1914

Theses de philosophia natural que sob a presidencia do Ilustrissimo e Excellentissimo Senhor Doutor Antonio dos Sanctos Viegas... se propõe defender na Universidade de Coimbra no dia 11 de julho de 1908 para obter o grau de Doutor Egas Ferreira Pinto Basto.

Coimbra : Imprensa da Universidade, 1908. [10] f.

Argumento da dissertação inaugural: Theoria dos electrões.

Assunto: Filosofia natural.

Cota: CAVE-00B15/Dis,4

Lecture Notes in Mathematics

1. Saint-Raymond, Laure

Hydrodynamic limits of the Boltzmann equation / Laure Saint-Raymond.

Berlin : Springer, 2009. XII, 188 p. : il. Lecture Notes in Mathematics , 0075-8434 ; 1971.

Referências bibliográficas (p. 181-186). - Índice (p. 187-188).

Assuntos: Equação de Boltzmann./ Dinâmica de fluidos./ Teoria do transporte./ Hidrodinâmica./ Boltzmann equation./ Fluid dynamics./ Transport theory./ Hydrodynamics

Cota: SP/LNM.1971/ex. 2

2. Mochizuki, Takuro, 1972-

Donaldson type invariants for algebraic surfaces / Takuro Mochizuki.

Berlin : Springer, 2009. XXIII, 383 p. Lecture Notes in Mathematics , 0075-8434 ; 1972.

Referências bibliográficas (p. 341-345). - Índice (p. 379-383).

Assuntos: Geometria algébrica./ Superfícies algébricas./ Algebraic geometry./ Algebraic surfaces

Cota: SP/LNM.1972/ex. 2

3. Min, Quian

Smooth ergodic theory for endomorphisms / Quian Min, Jian-Sheng Xie, Shu Zhu.

Berlin : Spinger, 2009. XIII, 277 p. Lecture notes in mathematics ; 1978.

Referências bibliográficas (271-274). - Índice (p. 275-277).

Assuntos: Teoria ergódica./ Sistemas dinâmicos./ Endomorfismos./ Expoentes de Lyapunov./ Entropia métrica./ Ergodic theory./ Dynamical systems./ Endomorphisms./ Lyapunov exponents./ Metric entropy

Cota: SP/LNM.1978/ex. 2

4. Etheridge, Alison

Some mathematical models from population genetics : École d'Été de Probabilités de Saint-flour XXXIX-2009 / Alison Etheridge.

Heidelberg ; New York : Springer, c2011. VIII, 119 p. : il. Lecture notes in mathematics, 0075-8434 ; 2011.

Bibliografía: p. 109-111. - Índice: p. 117-119.

Resumo: "This work reflects sixteen hours of lectures delivered by the author at the 2009 Saint-Flour summer school in probability. It provides a rapid introduction to a range of mathematical models that have their origins in theoretical population genetics. The models fall into two classes: forwards-in-time models for the evolution of frequencies of different genetic types in a population; and backwards-in-time (coalescent) models that trace out the genealogical relationships between individuals in a sample from the population. Some, like the classical Wright-Fisher model, date right back to the origins of the subject. Others, like the multiple merger coalescents or the spatial Lambda-Fleming-Viot process, are much more recent. All share a rich mathematical structure. Biological terms are explained, the models are carefully motivated and tools for their study are presented systematically."

Assuntos: Genética populacional -- Modelos matemáticos./ Population genetics -- Mathematical models.

Cota: SP/LNM.2012

5. Computational approach to Riemann surfaces / Alexander Bobenko, Christian Klein, editors.

New York : Springer, 2011. XII, 257 p. : il. Lecture notes in mathematics, 0075-8434 ; 2013.

Bibliografía: p. 252-253. - Índice: p. [255]-257.

Resumo: "This volume offers a well-structured overview of existent computational approaches to Riemann surfaces and those currently in development. The authors of the contributions represent the groups providing publically available numerical codes in this field. Thus this volume illustrates which software tools are available and how they can be used in practice. In addition examples for solutions to partial differential equations and in surface theory are presented. The intended audience of this book is twofold. It can be used as a textbook for a graduate course in numerics of Riemann surfaces, in which case the standard undergraduate background, i.e., calculus and linear

algebra, is required. In particular, no knowledge of the theory of Riemann surfaces is expected; the necessary background in this theory is contained in the Introduction chapter. At the same time, this book is also intended for specialists in geometry and mathematical physics applying the theory of Riemann surfaces in their research. It is the first book on numerics of Riemann surfaces that reflects the progress made in this field during the last decade, and it contains original results. There are a growing number of applications that involve the evaluation of concrete characteristics of models analytically described in terms of Riemann surfaces. Many problem settings and computations in this volume are motivated by such concrete applications in geometry and mathematical physics".

Assuntos: Curvas algébricas./ Superfícies de Riemann./ Curves, algebraic./ Riemann surfaces

Cota: SP/LNM.2013

6. Audin, Michèle

Fatou, Julia, Montel : the great prize of mathematical sciences of 1918, and beyond / Michèle Audin.

Heidekberg ; New York : Springer-Verlag, c2011. VIII, 332 p. : il. (alg. color.), facsims., port. Lecture notes in mathematics, 0075-8434 ; 2014.
Bibliografia: p. [297]-320. - Índice: p. [321]-332.

Sumário: "How did Pierre Fatou and Gaston Julia create what we now call Complex Dynamics, in the context of the early twentieth century and especially of the First World War? The book is based partly on new, unpublished sources. Who were Pierre Fatou, Gaston Julia, Paul Montel? New biographical information is given on the little known mathematician that was Pierre Fatou. How did the injury of Julia during WW1 influence mathematical life in France? From the reviews of the French version: "Audin's book is ! filled with marvelous biographical information and analysis, dealing not just with the men mentioned in the book's title but a large number of other players, too ! [It] addresses itself to scholars for whom the history of mathematics has a particular resonance and especially to mathematicians active, or even with merely an interest, in complex dynamics. ! presents it all to the reader in a very appealing form." (Michael Berg, The Mathematical Association of America, October, 2009).

Assuntos: Fatou, Pierre, 1878-1929 -- Vida e obra./ Julia, Gaston, 1893-1978 - - Vida e obra./ Montel, Paul, b. 1876 -- Vida e obra./ Matemática -- História -- Séc. 20./ Matemáticos -- França -- Biografia./ Prêmios de matemática./ Métodos iterativos./ Mapeamentos (matemática)./ Mapeamentos (matemática)./ Academia das Ciências, França./ Mathematics -- History -- 20th century./ Mathematicians -- France -- Biography./ Mathematics -- Awards./ Iterative methods (Mathematics)./ Mappings (Mathematics)./ Académie des sciences (France).

Cota: SP/LNM.2014

7. Flandoli, Franco

Random perturbation of PDEs and fluid dynamic models : École d'été de Probabilités de Saint-Flour XL-2010 / Franco Flandoli.

Heidelberg ; New York : Springer, c2011. IX, 176 p. : il. Lecture notes in mathematics, 0075-8434 ; 2015.

Bibliografia: p. 161-169.

Sumário: "The book deals with the random perturbation of PDEs which lack well-posedness, mainly because of their non-uniqueness, in some cases because of blow-up. The aim is to show that noise may restore uniqueness or prevent blow-up. This is not a general or easy-to-apply rule, and the theory presented in the book is in fact a series of examples with a few unifying ideas. The role of additive and bilinear multiplicative noise is described and a variety of examples are included, from abstract parabolic evolution equations with non-Lipschitz nonlinearities to particular fluid dynamic models, like the dyadic model, linear transport equations and motion of point vortices".

Assuntos: Equações diferenciais parciais./ Teoria da perturbação./ Processos estocásticos./ Equações diferenciais estocásticas./ Mecânica dos fluidos. / Perturbation (Mathematics)/ Fluid dynamics -- Mathematical models.

Cota: SP/LNM.2015

8. Lang, Jan

Eigenvalues, embeddings and generalised trigonometric functions / Jan Lane, David Edmunds.

Heidelberg ; New York : Springer, c2011. XI, 220 p. : il. Lecture notes in mathematics, 0075-8434 ; 2016.

Bibliografia: p. 211-215. - Índice: p. 217-220.

Contém: 1- Basic material. - 2- Trigonometric generalisations. - 3- The Laplacian and some natural variants. - 4 -Hardy operators. - 5- s-Numbers and generalised trigonometric functions. - 6- Estimates of s-numbers of weighted Hardy operators. - 7- More refined estimates. - 8- A non-linear integral system. - 9- Hardy operators on variable exponent spaces.

Sumário: "The main theme of the book is the study, from the standpoint of s-numbers, of integral operators of Hardy type and related Sobolev embeddings. In the theory of s-numbers the idea is to attach to every bounded linear map

between Banach spaces a monotone decreasing sequence of non-negative numbers with a view to the classification of operators according to the way in which these numbers approach a limit: approximation numbers provide an especially important example of such numbers. The asymptotic behavior of the s-numbers of Hardy operators acting between Lebesgue spaces is determined here in a wide variety of cases. The proof methods involve the geometry of Banach spaces and generalized trigonometric functions; there are connections with the theory of the p-Laplacian."

Assuntos: Teoria espectral./ Estimativas de valores próprios./ Problemas não-lineares de valores próprios./ Operadores de Riesz./ Teoria de operadores./ Eigenvalues./ Embeddings (Mathematics)/ Trigonometrical functions.

Cota: SP/LNM.2016.

9. Lebesgue and Sobolev spaces with variable exponents / Lars Diening ... [et al.].

Heidelberg ; New York : Springer, c2011. Lecture notes in mathematics, 0075-8434 ; 2015.

Bibliografia: p. 483-499. - Índice: p. 505-509.

Sumário: "The field of variable exponent function spaces has witnessed an explosive growth in recent years. The standard reference article for basic properties is already 20 years old. Thus this self-contained monograph collecting all the basic properties of variable exponent Lebesgue and Sobolev spaces is timely and provides a much-needed accessible reference work utilizing consistent notation and terminology. Many results are also provided with new and improved proofs. The book also presents a number of applications to PDE and fluid dynamics".

Assuntos: Espaços de Lebesgue./ Espaços de Sobolev./ Espaços de funções./ Lebesgue spaces./ Sobolev spaces./ Function spaces.

Cota: SP/LNM.2017

10. **Hu, Bei, 1962-**

Blow-up theories for semilinear parabolic equations / Bei Hu.

Heidelberg ; New York : Springer, c2011. X, 127 p. Lecture notes in mathematics, 0075-8434 ; 2018.

Bibliografia: p. 119-125. - Índice: p. 127.

Resumo: "There is an enormous amount of work in the literature about the blow-up behavior of evolution equations. It is our intention to introduce the theory by emphasizing the methods while seeking to avoid massive technical computations. To reach this goal, we use the simplest equation to illustrate the methods; these methods very often apply to more general equations".

Assuntos: Geometria algébrica./ Equações diferenciais parabólicas./ Equações parabólicas semilineares./ Blowing up (Algebraic geometry)./ Differential equations, Parabolic.

Cota: SP/LNM.2018

11. Adler, Robert J.

Topological complexity of smooth random functions : École d'Été de Probabilités de Saint-Flour XXXIX - 2009 / Robert J. Adler, Jonathan E. Taylor. Heidelberg ; New York : Springer, c2011.

VIII, 122 p. : il. (alg. color.). Lecture notes in mathematics, 0075-8434 ; 2019. Bibliografia: p. 115-118. - Índice: p. 121-122.

Sumário: "These notes, based on lectures delivered in Saint Flour, provide an easy introduction to the authors' 2007 Springer monograph "Random Fields and Geometry." While not as exhaustive as the full monograph, they are also less exhausting, while still covering the basic material, typically at a more intuitive and less technical level. They also cover some more recent material relating to random algebraic topology and statistical applications. The notes include an introduction to the general theory of Gaussian random fields, treating classical topics such as continuity and boundedness. This is followed by a quick review of geometry, both integral and Riemannian, with an emphasis on tube formulae, to provide the reader with the material needed to understand and use the Gaussian kinematic formula, the main result of the notes. This is followed by chapters on topological inference and random algebraic topology, both of which provide applications of the main results".

Assuntos: Distribuições de Gauss. -- Congresso./ Campos aleatórios./ Congresso./ Geometria integral. -- Congresso./ Probabilidade e estatística./ Topologia./ Gaussian processes. -- Congresses./ Random fields. -- Congresses./ Integral geometry. -- Congresses./ Probability and statistics./ Topology.

Cota: SP/LNM.2019

12. Isaev, Alexander

Spherical tube hypersurfaces / Alexander Isaev.

Heidelberg ; New York : Springer, c2011. XII, 220 p. : il. Lecture notes in mathematics, 0075-8434 ; 2020.

Bibliografia: p. 213-217. - Índice: p. 291-220.

Sumário: "We consider Levi non-degenerate tube hypersurfaces in complex linear space which are 'spherical', that is, locally CR-equivalent to the real hyperquadric. Spherical hypersurfaces are characterized by the condition of the vanishing of the CR-curvature form, so such hypersurfaces are flat from the CR-geometric viewpoint. On the other hand, such hypersurfaces are of interest from the point of view of affine geometry. Thus our treatment of spherical tube hypersurfaces in this book is two-fold: CR-geometric and affine-geometric. Spherical tube hypersurfaces turn out to possess remarkable properties. For example, every such hypersurface is real-analytic and extends to a closed real-analytic spherical tube hypersurface in complex space. One of our main goals is to give an explicit affine classification of closed spherical tube hypersurfaces whenever possible. In this book, we offer a comprehensive exposition of the theory of spherical tube hypersurfaces starting with the idea proposed in the pioneering work by P. Yang (1982) and ending with the new approach due to G. Fels and W. Kaup (2009)".

Assuntos: Hipersuperfícies./ Equação de Cauchy-Riemann./ Geometria./ Hypersurfaces./ Cauchy-Riemann equations./ Geometry.

Cota: SP/LNM.2020

13. Defant, Andreas

Classical summation in commutative and noncommutative LP-spaces / Andreas Defant.

New York : Springer Verlag, ©2011. VIII, 171 p. : il. Lecture notes in mathematics, 0075-8434 ; 2021.

Bibliografia: p. 159-163. - Índice: p. 167-171.

Sumário: "The aim of this research is to develop a systematic scheme that makes it possible to transform important parts of the by now classical theory of summation of general orthonormal series into a similar theory for series in noncommutative L_p -spaces constructed over a noncommutative measure space (a von Neumann algebra of operators acting on a Hilbert space together with a faithful normal state on this algebra).

Assuntos: Álgebra comutativa./ Álgebra não comutativa./ Análise funcional./ Espaços de Banach./ Espaços L_p ./ Séries ortogonais./ Commutative algebra./

Noncommutative algebras./ Functional analysis./ Banach spaces./ Lp spaces./ Orthogonal series.

Cota: SP/LNM.2021

14. **Nasell, Ingemar**

Extinction and quasi-stationarity in the stochastic logistic SIS model / Ingemar Nasell.

Heidelberg ; New York : Springer Verlag, c2011. XI, 199 p. : il. Lecture notes in mathematics, 0075-8434 ; 2022. Mathematical biosciences subseries.
Bibliografía: p. 195-198. - Índice: p. 199.

Assuntos: Biología populacional -- Modelos matemáticos./ Relíquias (biología) -- Modelos matemáticos./ Modelos estocásticos./ Biomatemática./ Population biology -- Mathematical models./ Relicts (Biology) -- Mathematical models./ Stochastic models./ Biomathematics.

Cota: SP/LNM.2022

15. **Veseli, Kreimir**

Damped oscillations of linear systems : a mathematical introduction / Kreimir Veseli.

Heidelberg : Springer, 2011. XV, 209 p. : il. Lecture notes in mathematics, 0075-8434 ; 2022.
Bibliografía: p. 203-206. - Índice: p. 207-209.

Assuntos: Amortecimento (Mecânica) -- Modelos matemáticos./ Sistemas lineares./ Damping (Mechanics) -- Mathematical models./ Linear systems.

Cota: SP/LNM.2023

16. **Padula, Mariarosaria**

Asymptotic stability of steady compressible fluids / Mariarosaria Padula.

Heidelberg ; New York : Springer, c2011. XIV, 235 p. Lecture notes in mathematics, 0075-8434 ; 2024.
Bibliografía: p. 223-229. - Índice: p. 231-235.

Resumo: "This volume introduces a systematic approach to the solution of some mathematical problems that arise in the study of the hyperbolic-parabolic systems of equations that govern the motions of thermodynamic fluids. It is intended for a wide audience of theoretical and applied mathematicians with an interest in compressible flow, capillarity theory, and control theory. The focus is particularly on recent results concerning nonlinear asymptotic stability, which are independent of assumptions about the smallness of the initial data. Of particular interest is the loss of control that sometimes results when steady flows of compressible fluids are upset by large disturbances. The main ideas are illustrated in the context of three different physical problems: (i) A barotropic viscous gas in a fixed domain with compact boundary. The domain may be either an exterior domain or a bounded domain, and the boundary may be either impermeable or porous. (ii) An isothermal viscous gas in a domain with free boundaries. (iii) A heat-conducting, viscous polytropic gas".

Assuntos: Dinâmica de fluidos -- Modelos matemáticos./ Estabilidade./ Fluid dynamics -- Mathematical models./ Compressibility./ Stability.

Cota: SP/LNM.2024

17. **Giacomin, Giambattista**

Disorder and critical phenomena through basic probability models : École d'Été de Probabilités de Saint-Flour XL-2010 / Giambattista Giacomin.

Heidelberg ; New York : Springer, c2011. XI, 130 p. : il. Lecture notes in mathematics, 0075-8434 ; 2025.

Bibliografia. - Índice: p. 127-128.

Resumo: "Understanding the effect of disorder on critical phenomena is a central issue in statistical mechanics. In probabilistic terms: what happens if we perturb a system exhibiting a phase transition by introducing a random environment? The physics community has approached this very broad question by aiming at general criteria that tell whether or not the addition of disorder changes the critical properties of a model: some of the predictions are truly striking and mathematically challenging. We approach this domain of ideas by focusing on a specific class of models, the "pinning models," for which a series of recent mathematical works has essentially put all the main predictions of the physics community on firm footing; in some cases, mathematicians have even gone beyond, settling a number of controversial issues. But the purpose of these notes, beyond treating the pinning models in full detail, is also to convey the gist, or at least the flavor, of the "overall picture," which is, in many respects, unfamiliar territory for mathematicians".

Assuntos: Modelos ordem desordem./ Mecânica estatística -- Modelos matemáticos./ Fenómenos críticos -- física./ Probabilidades./ Order-disorder models./ Statistical mechanics -- Mathematical models./ Critical phenomena (Physics)./ Probabilities.

Cota: SP/LNM.2025

18. Le Jan, Yves, 1952-

Markov paths, loops and fields : École d'Été de Probabilités de Saint-Flour XXXVIII-2008 / Yves Le Jan.

Berlin ; Heidelberg : Springer-Verlag, c2011. VIII, 124 p. Lecture notes in mathematics, 0075-8434 ; 2026.

Bibliografía: p. 115-117. - Índice: p. 119.

Resumo: The purpose of these notes is to explore some simple relations between Markovian path and loop measures, the Poissonian ensembles of loops they determine, their occupation fields, uniform spanning trees, determinants, and Gaussian Markov fields such as the free field. These relations are first studied in complete generality for the finite discrete setting, then partly generalized to specific examples in infinite and continuous spaces.

Assuntos: Processos de Markov./ Processos estocásticos./ Markov processes./ Stochastic processes.

Cota: SP/LNM.2026

19. Supersymmetry in mathematics and physics : UCLA, Los Angeles, USA 2010 / Sergio Ferrara, Rita Fioresi, V.S. Varadarajan, editors.

Berlin ; New York : Springer, c2011. X, 273 p. Lecture notes in mathematics, 0075-8434 ; 2027.

Bibliografía.

Sumário: Supersymmetry was created by the physicists in the 1970's to give a unified treatment of fermions and bosons, the basic constituents of matter. Since then its mathematical structure has been recognized as that of a new development in geometry, and mathematicians have busied themselves with exploring this aspect. This volume collects recent advances in this field, both from a physical and a mathematical point of view, with an accent on a rigorous treatment of the various questions raised.

Assuntos: Supersimetrías -- Congressos./ Supersymmetry -- Congresses.

Cota: SP/LNM.2027

20. C.I.M.E. Summer School (2008 : Cetraro, Italy)

Nonlinear PDE's and applications : C.I.M.E. Summer School, Cetraro, Italy, 2008 / Stefano Bianchini ... [et al.] ; editors, Luigi Amrosio, Giuseppe Savaré.

Heidelberg ; New York : Springer, c2011. XIII, 224 p. : il. (alg. color.). Lecture notes in mathematics, 0075-8434 ; 2028.

Bibliografia.

Resumo: This volume collects the notes of the CIME course "Nonlinear PDE's and applications" held in Cetraro (Italy) on June 23-28, 2008. It consists of four series of lectures, delivered by Stefano Bianchini (SISSA, Trieste), Eric A. Carlen (Rutgers University), Alexander Mielke (WIAS, Berlin), and Cedric Villani (Ecole Normale Supérieure de Lyon). They presented a broad overview of far-reaching findings and exciting new developments concerning, in particular, optimal transport theory, nonlinear evolution equations, functional inequalities, and differential geometry. A sampling of the main topics considered here includes optimal transport, Hamilton-Jacobi equations, Riemannian geometry, and their links with sharp geometric/functional inequalities, variational methods for studying nonlinear evolution equations and their scaling properties, and the metric/energetic theory of gradient flows and of rate-independent evolution problems. The book explores the fundamental connections between all of these topics and points to new research directions in contributions by leading experts in these fields.

Assuntos: Equações diferenciais parciais – Congressos./ Equações diferenciais não lineares. -- Congressos./ Differential equations, Partial Congresses./ Differential equations, Nonlinear -- Congresses.

Cota: SP/LNM.2028

21. Gillibert, Pierre

From objects to diagrams for ranges of functors / Pierre Gillibert, Friedrich Wehrung.

Berlin ; Heidelberg : Springer-Verlag, 2011. X, 158 p. Lecture notes in mathematics, 0075-8434 ; 2029.

Bibliografia: p. 143-146. - Índice: p. 153-156.

Assuntos: Functores./ Álgebra booleana./ Lógica algébrica./ Functor theory./ Algebra, Boolean./ Algebraic logic.

Cota: SP/LNM.2029

22. **Matsumoto, Yukio**

Pseudo-periodic maps and degeneration of Riemann surfaces / Yukio Matsumoto, José María Montesinos-Amilibia.

Heidelberg ; London : Springer, c2011. 238 p. : il. Lecture notes in mathematics, 0075-8434 ; 2030.

Bibliografía: p. 233-235. - Índice: p. 237-238.

Resumo: The first part of the book studies pseudo-periodic maps of a closed surface of genus greater than or equal to two. This class of homeomorphisms was originally introduced by J. Nielsen in 1944 as an extension of periodic maps. In this book, the conjugacy classes of the (chiral) pseudo-periodic mapping classes are completely classified, and Nielsen's incomplete classification is corrected. The second part applies the results of the first part to the topology of degeneration of Riemann surfaces. It is shown that the set of topological types of all the singular fibers appearing in one parameter holomorphic families of Riemann surfaces is in a bijective correspondence with the set of conjugacy classes of the pseudo-periodic maps of negative twists. The correspondence is given by the topological monodromy.

Assuntos: Superfícies riemannianas./ Riemann surfaces.

Cota: SP/LNM.2030

23. **Akiyama, Jin**

Factors and factorizations of graphs : proof techniques in factor theory / Jin Akiyama, Mikio Kano.

Heidelberg ; New York : Springer Verlag, c2011. XII, 353 p. : il. Lecture notes in mathematics, 0075-8434 ; 2031.

Bibliografía: p. 337-347. - Índice: p. [351]-353.

Resumo: This book chronicles the development of graph factors and factorizations. It pursues a comprehensive approach, addressing most of the important results from hundreds of findings over the last century. One of the main themes is the observation that many theorems can be proved using only a few standard proof techniques. This stands in marked contrast to the seemingly countless, complex proof techniques offered by the extant body of papers and books. In addition to covering the history and development of this area, the book offers conjectures and discusses open problems. It also includes numerous explanatory figures that enable readers to progressively and intuitively understand the most important notions and proofs in the area of factors and factorization.

Assuntos: Álgebra -- Factorização./ Factorização – Matemática./ Teoria dos grafos./ Factors (Álgebra)./ Factorization (Mathematics)./ Graph theory.

Cota: SP/LNM.2031

24. **Barmak, Jonathan A**

Algebraic topology of finite topological spaces and applications / Jonathan A. Barmak.

Heidelberg ; New York : Springer, c2011. XVII, 170 p. : il. Lecture notes in mathematics, 0075-8434 ; 2032.

Bibliografia: p. 161-164. - Índice: p. 167-170.

Resumo: This volume deals with the theory of finite topological spaces and its relationship with the homotopy and simple homotopy theory of polyhedra. The interaction between their intrinsic combinatorial and topological structures makes finite spaces a useful tool for studying problems in Topology, Algebra and Geometry from a new perspective. In particular, the methods developed in this manuscript are used to study Quillen's conjecture on the poset of p -subgroups of a finite group and the Andrews-Curtis conjecture on the 3-deformability of contractible two-dimensional complexes. This self-contained work constitutes the first detailed exposition on the algebraic topology of finite spaces. It is intended for topologists and combinatorialists, but it is also recommended for advanced undergraduate students and graduate students with a modest knowledge of Algebraic Topology.

Assuntos: Espaços topológicos./ Topologia algébrica./ Homotopia./ Conjuntos parcialmente ordenados./ Grupos finitos./ Topologia algébrica./ Topological spaces./ Algebraic topology./ Homotopy theory./ Partially ordered sets./ Algebraic topology.

Cota: SP/LNM.2032

25. **Koltchinskii, Vladimir**

Oracle inequalities in empirical risk minimization and sparse recovery problems : École d'Été de Probabilités de Saint-Flour XXXVIII-2008 / Vladimir Koltchinskii.

Berlin ; Heidelberg ; New York : Springer Verlag 2011. IX, 254 p. Lecture notes in mathematics, 0075-8434 ; 2033.

Bibliografia: p. 241-247. - Índice: p. 249-250.

Resumo: The purpose of these lecture notes is to provide an introduction to the general theory of empirical risk minimization with an emphasis on excess risk

bounds and oracle inequalities in penalized problems. In recent years, there have been new developments in this area motivated by the study of new classes of methods in machine learning such as large margin classification methods (boosting, kernel machines). The main probabilistic tools involved in the analysis of these problems are concentration and deviation inequalities by Talagrand along with other methods of empirical processes theory (symmetrization inequalities, contraction inequality for Rademacher sums, entropy and generic chaining bounds). Sparse recovery based on l_1 -type penalization and low rank matrix recovery based on the nuclear norm penalization are other active areas of research, where the main problems can be stated in the framework of penalized empirical risk minimization, and concentration inequalities and empirical processes tools have proved to be very useful.

Assuntos: Análise de regressão -- Congressos./ Teoria da estimação -- Congressos./ Estatística não paramétrica -- Congressos./ Probabilidades./ Desigualdades matemáticas./ Matrizes esparsas./ Regression analysis - Congresses./ Estimation theory -- Congresses./ Nonparametric statistics -- Congresses./ Probabilities./ Inequalities (Mathematics)./ Sparse matrices.

Cota: SP/LNM.2033.

26. Bonfiglioli, Andrea

Topics in noncommutative algebra : the theorem of Campbell, Baker, Hausdorff and Dynkin / Andrea Bonfiglioli, Roberta Fulci.

Berlin ; Heidelberg ; New York : Springer Verlag, 2012. XXII, 539 p. Lecture notes in mathematics, 0075-8434 ; 2034.

Bibliografia: p. 529-536. - Índice: p. 537-539.

Sumário: Motivated by the importance of the Campbell, Baker, Hausdorff, Dynkin Theorem in many different branches of Mathematics and Physics (Lie group-Lie algebra theory, linear PDEs, Quantum and Statistical Mechanics, Numerical Analysis, Theoretical Physics, Control Theory, sub-Riemannian Geometry), this monograph is intended to : fully enable readers (graduates or specialists, mathematicians, physicists or applied scientists, acquainted with Algebra or not) to understand and apply the statements and numerous corollaries of the main result, provide a wide spectrum of proofs from the modern literature, comparing different techniques and furnishing a unifying point of view and notation, provide a thorough historical background of the results, together with unknown facts about the effective early contributions by Schur, Poincare, Pascal, Campbell, Baker, Hausdorff and Dynkin, give an outlook on the applications, especially in Differential Geometry (Lie group theory) and Analysis (PDEs of subelliptic type) and quickly enable the reader, through a description of the state-of-art and open problems, to understand the modern literature concerning a theorem which, though having its roots in the beginning of the 20th century, has not ceased to provide new problems and applications.

The book assumes some undergraduate-level knowledge of algebra and analysis, but apart from that is self-contained. Part II of the monograph is devoted to the proofs of the algebraic background. The monograph may therefore provide a tool for beginners in Algebra.

Assuntos: Álgebras de Lie./ Grupos de Lie./ Álgebras não comutativas./ Lie algebras./ Lie groups./ Noncommutative algebras.

Cota: SP/LNM.2034

27. Mathematical modeling in biomedical imaging II : optical, ultrasound, and opto-acoustic tomographies / Habib Ammari, editor.

Berlin ; Heidelberg ; New York : Springer Verlag, 2011. VII, 160 p. : il. (alg. color). Lecture notes in mathematics, 0075-8434 ; 2035.
Bibliografia. - Índice: p. 159-160.

Resumo: This volume reports on recent mathematical and computational advances in optical, ultrasound, and opto-acoustic tomographies. It outlines the state-of-the-art and future directions in these fields and provides readers with the most recently developed mathematical and computational tools. It is particularly suitable for researchers and graduate students in applied mathematics and biomedical engineering.

Assuntos: Engenharia biomédica -- Modelos matemáticos./ Tomografia óptica -- Modelos matemáticos./ Imagem ultra-sônica -- Modelos matemáticos./ Sistemas de imagem em medicina -- Modelos matemáticos./ Biomedical engineering -- Mathematical models./ Optical tomography -- Mathematical models./ Ultrasonic imaging -- Mathematical models./ Imaging systems in medicine -- Mathematical models.

Cota: SP/LNM.2035

28. **Mayer, Volker, 1964-**

Distance expanding random mappings, thermodynamical formalism, Gibbs measures and fractal geometry / Volker Mayer, Bartłomiej Skorulski, Mariusz Urbanski.

Heidelberg ; New York : Springer, c2011. X 112 p. : il. (alg. color). Lecture notes in mathematics, 0075-8434 ; 2036.
Bibliografia: p. 109-110. - Índice: p. 111-112.

Resumo: The theory of random dynamical systems originated from stochastic differential equations. It is intended to provide a framework and techniques to describe and analyze the evolution of dynamical systems when the input and output data are known only approximately, according to some probability distribution. The development of this field, in both the theory and applications, has gone in many directions. In this manuscript we introduce measurable expanding random dynamical systems, develop the thermodynamical formalism and establish, in particular, the exponential decay of correlations and analyticity of the expected pressure although the spectral gap property does not hold. This theory is then used to investigate fractal properties of conformal random systems. We prove a Bowen's formula and develop the multifractal formalism of the Gibbs states. Depending on the behavior of the Birkhoff sums of the pressure function we arrive at a natural classification of the systems into two classes: quasi-deterministic systems, which share many properties of deterministic ones; and essentially random systems, which are rather generic and never bi-Lipschitz equivalent to deterministic systems. We show that in the essentially random case the Hausdorff measure vanishes, which refutes a conjecture by Bogenschutz and Ochs. Lastly, we present applications of our results to various specific conformal random systems and positively answer a question posed by Bruck and Bueger concerning the Hausdorff dimension of quadratic random Julia sets.

Assuntos: Sistemas dinâmicos aleatórios./ Fractais./ Medidas de Hausdorff./ Random dynamical systems./ Fractals./ Hausdorff measures.

Cota: SP/LNM.2036

Olimpíadas Portuguesas de Matemática – OPM

1. Adolio Cascante, Norma.

Olimpiadas Costarricenses de Matematica (OLCOMA) : banco de problemas con soluciones, III eliminatoria Nacional / elaborado por los miembros del Comité organizador, Norma Adolio Cascante, Rosalinda Sanabris Monge e José Fabio Gonzalez Argüello.

[S. l. : s.n.] 1997.

Contém: Jueves 6 de Novembre de 1997 ; Viernes 7 de Novembre de 1997.

Assunto: Olimpíadas matemáticas -- Costa Rica.

Cota: SP/I-Oli.Cos, 6-97/ex.1 (OPM)
SP/I-Oli.Cos, 6-97/ex.2 (OPM)
SP/I-Oli.Cos, 7-97/ex.2 (OPM)

2. Barbeau, Edward J.

Mathematical Olympiads' correspondence program (1995-96) / Edward J. Barbeau.

Ottawa : Canadian Mathematical Society, 1997. 105 p. : il. A taste of mathematics= Aime-T-On les Mathématiques; 1.

Assuntos: Matemática -- Exercícios./ Matemática -- Olimpíadas.

Cota: SP/I-TAS,1/ex. 1 (OPM)

SP/I-TAS,1/ex. 2 (OPM)

SP/I-TAS,1/ex. 3 (OPM)

3. Shawyer, Bruce

Algebra-intermediate methods / Bruce Shawyer.

Ottawa : Canadian Mathematical Society = Société Mathématique du Canada, 1999. IV, 43 p. A taste of mathematics = Aime-T-On les Mathématiques ; 2.

Assunto: Algebra.

Cota: SP/I-TAS,2/ex. 1 (OPM)

4. Barbeau, Edward J.

Inequalities / Edward J. Barbeau and Bruce L. R. Shawyer.

Ottawa : Canadian Mathematical Society 2000. 60 p. A Taste of Mathematics = Aime-T-On les Mathématiques ; 4.

Assuntos: Desigualdades./ Inequalities.

Cota: SP/I-TAS,4/ex. 2 (OPM)

5. 10 matemáticos : 100 problemas / Patricia Fauring...[et al.] ; organização: Eduardo Wagner.

Rio de Janeiro : OBM, 2008. 207 p. : il.

Assunto: Matemática -- Problemas de olimpíadas

Cota: SP/II-FAU.Mat/ex. 1 (OPM)

6. Thirty years of brazilian math olympiads / Carlos Yuzo Shine, organizer.

Rio de Janeiro : Editora AOBM 2009. [12] 149 p. : il.

Assunto: Olimpíadas matemáticas -- Brasil.

Cota: SP/II-Thi/ex. 1 (OPM)

SP/II-Thi/ex. 2 (OPM)

SP/II-Thi/ex. 3 (OPM)

SP/II-Thi/ex. 4 (OPM)

SP/II-Thi/ex. 5 (OPM)

SP/II-Thi/ex. 6 (OPM)

7. **Acevedo de Mannique, Myriam**

Recorriendo el álgebra : de la solución de ecuaciones al álgebra abstracta / Myriam Acevedo de Manrique, Mary Falk de Losada.

Santa Fé de Bogotá : Universidad Nacional de Colombia, 1997. 369, [28] p. : il. Colciencias.

Bibliografía: p. [[371-374]. - Índice: p. [375-382].

Assuntos: Álgebra./ Formação de professores.

Cota: SP/I-ACE (OPM)

8. **Andreescu, Titu, 1956-**

Mathematical Olympiad treasures / Titu Andreescu, Bogdan Enescu.

Boston : Birkhauser 2004. VI, 234 p. : il.

Assunto: Olimpíadas matemáticas -- Exercícios.

Cota: SP/I-AND.Mat (OPM)

9. **Millington, Jon**

Petiscos matemáticos : ideias interessantes para ocupar os momentos de lazer / Jon Millington ; trad. Joana Rosa.

Lisboa : Replicação, 2008. 96 p. : il. ; 21 cm.

Assuntos: Matemática divertida./ Matemática – jogos./ Jogos matemáticos.

Cota: SP/I-MIL (OPM)

10. Monk, David

New problems in Euclidean geometry / David Monk.

Leeds : The United Kingdom Mathematics Trust, 2009. X, 115 p. : il. Problems ; 1.

Bibliografia.

Assuntos: Geometria -- Problemas./ Matemática -- Estudo e ensino.

Cota: SP/I-New/ex. 1 (OPM)

SP/I-New/ex. 2 (OPM)

11. Contar e fazer contas : uma introdução à teoria dos números / J. Eurico Nogueira... [et al.] ; rev. Ana Isabel Silveira.

Lisboa : Sociedade Portuguesa de Matemática : Gradiva, 2004. 213 p. : il. Temas de matemática ; 2.

Bibliografia: p. 201-204.

Assuntos: Teoria dos números./ Número.

Cota: SP/I-NOG (OPM)

12. Granera V., Alejandro

I Curso de nivelacion para la III prueba de la Olimpiada Costarricense de Matematica / elaborado por Alejandro Granera V.

[S. l. : s.n.], 1997. 30 p.

Assunto: Olimpíadas matemáticas -- Costa Rica.

Cota: SP/I-Oli.Cos, 3-97 (OPM)

13. Olimpíadas matemáticas rusas : problemas selectos / Patricia Fauring ... [et al.].

Buenos Aires : Red Olímpica, 1995. 133 p. : il. Coleccion Atenea.

Assunto: Olimpíadas matemáticas-- Rússia.

Cota: SP/I-Oli.Rus (OPM)

14. **Pranesachar, C. R.**

Problem primer for the Olympiad / C. R. Pranesachar, B. J. Venkatachala, C. S. Yogananda.

Bangalore : Prism books PVT Ltd., 2001. XII, 129 p. il.

Assunto: Olimpíadas matemáticas -- Exercícios.

Cota: SP/I-PRA (OPM)

15. **Rincón Abella, Germán**

Solucionario / Germán Rincón Abella.

Santafé de Bogotá : Universidad Antonio Nariño : Olimpiadas Colombianas de Matemáticas, 1996. 77 p : il.

Assuntos: Geometria./ Geometria -- Exercícios./ Olimpíadas matemáticas -- Colombia.

Cota: SP/I-RIN (OPM)

16. **Singmaster, David**

Notes on Rubik's magic cube / David Singmaster.

Hillside, N. J. : Enslow Publishers, 1981. VI, 73 p. : il.V.
Bibliografía: p. 65-68. - Índice: p. 69-73.

Assuntos: Cubo de Rubik./ Modelos de poliedros./ Teoria de grupos./ Rubik's Cube./ Polyhedra -- Models./ Group theory.

Cota: SP/I-SIN (OPM)

17. Shawyer, Bruce

Algebra-intermediate methods / Bruce Shawyer.

Ottawa : Canadian Mathematical Society = Société Mathématique du Canada, 1999. IV, 43 p. A taste of mathematics = Aime-T-On les Mathématiques ; 2.

Assunto: Algebra.

Cota: SP/I-TAS,2/ex. 2 (OPM)

18. Barbeau, Edward J.

Inequalities / Edward J. Barbeau and Bruce L. R. Shawyer.

Ottawa : Canadian Mathematical Society 2000. 60 p. A Taste of Mathematics = Aime-T-On les Mathématiques ; 4.

Assuntos: Desigualdades./ Inequalities

Cota: SP/I-TAS,4/ex. 2 (OPM)

19. The tool-chest : (mark 2).

[Belconnen] : Australian Mathematics Competition 1987. 97 p. : il.

Assunto: Olimpíadas matemáticas -- Austrália

Cota: SP/I-Too (OPM)

20. Asociación Educativa Pascual Saco Oliveros

Olimpiada Internacional de Matemática / Asociación Educativa Pascual Saco Olivero.

Lima : Editorial Marwill 2007. 273 p. : il.

Bibliografia.

Assunto: Olimpíadas matemáticas -- Perú

Cota: SP/II-ASS (OPM)

21. Fauring, Patricia

Olimpíada Matemática Rioplatense : 9ª a 12ª / Patricia Fauring, Flora Gutiérrez, Svetoslav Savchev.

Santa Fe : Red Olímpica 2004. 191 p : il.

Assunto: Olimpíadas matemáticas -- Rioplastense.

Cota: SP/II-FAU, 9ª-12ª/ex.1 (OPM)

SP/II-FAU, 9ª-12ª/ex.2 (OPM)

22. Hungarian problem book I : based on the Eötvös Competitions, 1894-1905 / Revised and edited by G. Hajós, G. Neukomm, J. Surányi ; originally compiled by József Kurschák ; translated by Elvire Rapaport.

[Washington] : MAA c1963. 111 p. New mathematical library ; 11.

Assunto: Matemática -- Problemas

Cota: SP/II-Hun (OPM)

23. Picado, Jorge Manuel Senos da Fonseca.

Olimpíadas de matemática: enunciados e soluções: categoria B, 10º, 11º e 12º anos / Jorge Picado, Paulo Eduardo Oliveira, Sociedade Portuguesa de Matemática.

Lisboa : Texto Editores, 2007. 2 vol. : il. ; 24 cm.

Assuntos: Matemática -- Exercícios./ Olimpíadas matemáticas -- Portugal.

Cota: SP/II-OLI.Oli/V. 1 (OPM)

SP/II-OLI.Oli/V. 2 (OPM)

24. Oliveira, Paulo Eduardo Aragão Aleixo Neves de, 1962-

Olimpíadas de matemática: enunciados e soluções: categoria A, 8º e 9º anos / Paulo Eduardo Oliveira, Jorge Picado, Sociedade Portuguesa de Matemática.

Lisboa: Texto Editores, 2007. 2 vol. : il.

Assuntos: Matemática – Exercícios./ Olimpíadas matemáticas -- Portugal

Cota: SP/II-OLI/V. 1, ex. 1 (OPM)

SP/II-OLI/V. 1, ex. 2 (OPM)

SP/II-OLI/V. 2 (OPM)

25. Österreichische Mathematik-Olympiaden, 2000-2008 : Aufgaben und Lösungen / herausgegeben von Gerd Baron und Birgit Vera Schmidt.

Wien : G. B./B. V. S. 2009. 208 p. : il.

Assunto: Olimpíadas matemáticas -- Áustria

Cota: SP/II-Ost,00-08/ex. 1 (OPM)

SP/II-Ost,00-08/ex. 2 (OPM)

26. Olimpíadas Ibero-americanas de Matemática, 22, Coimbra, 2007

3º Simpósio Ibero-Americano de Educação Matemática com ênfase na resolução de problemas / [João Queiró, Sílvia Barbeiro, Júlio Neves, organizadores do Simpósio].

Coimbra : DM-UC SPM 2007. 21 p.

Assunto: Metodologia da matemática -- [Congressos]

Cota: SP/II-Sim.3 (OPM)

27. Gardiner, Tony, 1947-

Senior Mathematical challenge : [the UK National mathematics contest 1988-1996] / Tony Gardiner.

Cambridge : Cambridge University Press 2002. III, 180 p.

Assunto: Matemática -- Competição -- Reino Unido

Cota: SP/II-UK,88-96 (OPM)

28. The Vietnamese Mathematical Olympiad : (1990-2006) : selected problems.

[Hanoi] : Education Publishing House, [2007]. 218 p.

Assuntos: Olimpíadas matemáticas – Vietname./ Matemática -- Competição./
Matemática -- Exercícios

Cota: SP/II-Vie.Sel (OPM)

29. **International Mathematical Olympiad, 41, Korea, 2000**

The 41st International Mathematical Olympiad : IMO - 2000 Korea.

[S.I.] : Korean Math. Society 2000. 31 p. : fot. color.

Assunto: Olimpíadas matemáticas -- Coreia.

Cota: SP/VIII-IMO,00/Fot (OPM)

30. **International Mathematical Olympiad, 42, Washington, 2001**

The 42nd IMO: a report on the International Mathematical Olympiad held in Washington, D.C., USA, July 1-14, 2001 / prepared and edited by Walter E. Mienka.

Lincoln, Nebraska : University of Nebraska-Lincoln 2001. 123 p. : il., fotos.

Assunto: Olimpíadas matemáticas -- Estados Unidos da América.

Cota: SP/VIII-IMO,01/ex.1 (OMP)

SP/VIII-IMO,01/ex.2 (OMP)

31. **International Mathematical Olympiad, 46, México, 2005**

The 46th International Mathematical Olympiad: program / prepared by Gabriela Campero Arena, Montserrat García Campos, Olga Tchebotareva Nicolaevna.

[S.I.] : IMO-2005 2005.

Contém o programa da Olimpíada.

Assunto: Olimpíadas matemáticas -- México.

Cota: SP/VIII-IMO,05/Pro (OPM)

32. International Mathematical Olympiad, 46, México, 2005

Proposed problems for the 46th International Mathematical Olympiad : (short list).

[S.I.] : IMO-2005 2005. 5 p.

Assunto: Olimpíadas matemáticas – México.

Cota: SP/VIII-IMO,05/Sho (OPM)

33. International Mathematical Olympiad, 46, México, 2005

Proposed problems for the 46th International Mathematical Olympiad : (short list).

[S.I.] : IMO-2005 2005. 51 p.

Contém soluções dos exercícios. - Contém folhas soltas, com soluções alternativas dos exercícios.

Assunto: Olimpíadas matemáticas -- México.

Cota: SP/VIII-IMO,05/Sol (OPM)

34. International Mathematical Olympiad, 36, Canada, 1995

36th International Mathematical Olympiad = 36e Olympiade Internationale de Mathématiques / edited by Bruce Shawyer.

[Ontario] : Canadian Mathematical Society, 1997. XV, 347 p. : fot. color.

ASSUNTO: Olimpíadas matemáticas -- Canadá.

Cota: SP/VIII-IMO,95/ex. 1 (OPM)
SP/VIII-IMO,95/ex. 2 (OPM).

35. International Mathematical Olympiad, 39, Taipei, 1998

Golden book : '98 Taiwan (ROC) : 39 th International Mathematical Olympiad.
Taipei : [s.n.] 1998.

[18], 111 p.

Textos dos problemas em: inglês, francês, chinês, alemão, russo, espanhol, bósnio, búlgaro, croata, checo, dinamarquês, holandês, estoniano, grego, georgiano, hebreu, húngaro, indonésio, italiano, japonês, cazaque, coreano, letão, lituano, macedónio, malaio, mongol, árabe marroquino, norueguês, persa, polaco, português, romeno, sérvio, cingalês, eslovaco, esloveno, sueco, tailandês, turco, ucraniano, vietnamita.

Assunto: Olimpíadas matemáticas – Taipei.

Cota: SP/VIII-IMO,98/ex.1 (OPM)
SP/VIII-IMO,98/ex.2 (OPM).

36. Rallye mathématique d'Alsace 1975-1976 : rapport technique.

[Strasbourg : Institut de Recherche sur l'Enseignement des Mathématiques 1976]. [p. var.].

Contém os relatórios dos anos de 1976 a 1987.

Cota: SP/VIII-Ral,75-76 (OPM).

Pré-publicações

1. Oliveira, Paulo Eduardo Aragão Aleixo Neves de, 1962-
Weighted sums of associated variables / Paulo Eduardo Oliveira.

Coimbra : DMUC, 2012. 12 p. Pré-publicações DMUC ; 12-08.

Bibliografia: p. 11-12.

Assuntos: Weighted sums./ Association./ Almost sure convergence.

Cota: SP/DMUC.Pre.12/08

2. Ferreira, J. A., 1964-

Supra-superconvergent methods for quasilinear coupled problems / J. A. Ferreira e L. Pinto.

Coimbra : DMUC, 2012. 31 p. : il. Pré-publicações DMUC ; 12-09.
Bibliografia: p. 30-31.

Assuntos: Piecewise linear finite element method./ Finite difference methods./ Supraconvergence./ Pressure./ Concentration./ Porous media.

Cota: SP/DMUC.Pre.12/09

3. Rodelo, Diana Ferreira, 1971-

Higher central extensions via commutators / Diana Rodelo e Tim Van der Linden.

Coimbra : DMUC, 2012. 24 p. Pré-publicações DMUC ; 12-10.
Bibliografia: p. 22-24.

Assuntos: Cohomologia./ Higgins./ Huq./ Smith commutator./ Higher central extension./ Hopf formula./ Semi-abelian./ Exact Mal'tsev category./ (Co)homology.

Cota: SP/DMUC.Pre.12/10

4. Moura, Susana Margarida Pereira da Silva Domingues de, 1971-

On trace spaces of 2-microlocal Besov spaces with variable integrability / Susana D. Moura, Júlio Neves e Cornelia Schneider.

Coimbra : DMUC, 2012. 22 p. Pré-publicações DMUC ; 12-11.
Bibliografia: p. 20-22.

Assuntos: 2-microlocal Besov spaces with variable integrability./ Trace spaces.

Cota: SP/DMUC.Pre.12/11