

Department of Mathematics and Statistics at UNM - Books Published or Edited

Compiled by María Cristina Pereyra on September 16, 2023

Most of the references come from MathSciNet and include multiple editions and all translations recorded there. Sometimes Amazon-books was used to trace other references that the compiler knew existed but were not recorded in MathSciNet. Included are all publications the compiler was able to find from our current faculty, current adjunct faculty (Scott Dumas and Milo Schield), Emeriti/Retired (Richard Allen, Charles Boyer, Liongshin Hahn, Jens Lorenz, Stanly Steinberg, Alex Stone), and diseased and prolific author and former Emeritus Professor Reuben Hersh. Please let me know if I am missing some references, yours or others.

1. *Fundamentals of numerical computing.*
Shampine, L. F.; **Allen, R. C., Jr.**; Pruess, S.
John Wiley & Sons, Inc., New York, 1997, x+268 pp.
ISBN: 0-471-16363-5
2. *Numerical computing: an introduction.*
Shampine, Lawrence F.; **Allen, Richard C., Jr.**
W. B. Saunders Co., Philadelphia-London-Toronto, Ont., 1973, vii+258 pp.
3. *Sasakian geometry.*
Boyer, Charles P.; Galicki, Krzysztof
Oxford Math. Monogr.
Oxford University Press, Oxford, 2008, xii+613 pp.
ISBN: 978-0-19-856495-9
4. *Purely arithmetic PDEs over a p -adic field— δ -characters and δ -modular forms.*
Buium, Alexandru; Miller, Lance Edward
Mem. Eur. Math. Soc., 6
European Mathematical Society (EMS), Berlin, 2023, 106 pp.
ISBN: 978-3-98547-057-0; 978-3-98547-557-5

5. *Foundations of arithmetic differential geometry.*
Buium, Alexandru
 Math. Surveys Monogr., 222
 American Mathematical Society, Providence, RI, 2017, x+344 pp.
 ISBN: 978-1-4704-3623-0

6. *Mathematics: a Minimal Introduction.*
Buium, Alexandru
 CRC Press, 2013, 226 pp.
 ISIN: B00GM0EGVQ

7. *Arithmetic differential equations.*
Buium, Alexandru
 Math. Surveys Monogr., 118
 American Mathematical Society, Providence, RI, 2005, xxxii+310 pp.
 ISBN: 0-8218-3862-8

8. *Kolchin, Ellis Selected works of Ellis Kolchin with commentary.*
 Commentaries by Armand Borel, Michael F. Singer, Bruno Poizat, **Alexandru Buium** and Phyllis J. Cassidy.
 Edited and with a preface by Hyman Bass, **Buium** and Cassidy
 American Mathematical Society, Providence, RI, 1999. xiv+639 pp.
 ISBN:0-8218-0542-8

9. *Differential algebra and Diophantine geometry.*
Buium, Alexandru
 Actualités Math.[Current Mathematical Topics]
 Hermann, Paris, 1994, x+182 pp.
 ISBN: 2-7056-6226-X

10. *Differential algebraic groups of finite dimension.*
Buium, Alexandru
 Lecture Notes in Math., 1506
 Springer-Verlag, Berlin, 1992, xvi+145 pp.
 ISBN: 3-540-55181-6

11. *Log-Linear Models and Logistic Regression. Third Edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer, New York (2023).

12. *Plane answers to complex questions—the theory of linear models. Fifth Edition.*
Christensen, Ronald

- Springer Texts Statist.
 Springer, Cham, 2020, xxii+529 pp.
 ISBN: 978-3-030-32096-6; 978-3-030-32097-3
13. *Advanced linear modeling. Statistical learning and dependent data. Third Edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer, Cham, 2019, xxiii+608 pp.
 ISBN: 978-3-030-29163-1; 978-3-030-29164-8
14. *Plane answers to complex questions. The theory of linear models. Fourth Edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer, New York, 2011, xxii+494 pp.
 ISBN: 978-1-4419-9815-6
15. *Bayesian ideas and data analysis.*
Christensen, Ronald; Johnson, Wesley; Branscum, Adam; Hanson, Timothy E.
 Texts Statist. Sci. Ser.
 CRC Press, Boca Raton, FL, 2011, xviii+498 pp.
 ISBN: 978-1-4398-0354-7
16. *Plane answers to complex questions. The theory of linear models. Third Edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer-Verlag, New York, 2002, xx+473 pp.
 ISBN: 0-387-95361-2
17. *Advanced linear modeling. Multivariate, time series, and spatial data; nonparametric regression and response surface maximization. Second edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer-Verlag, New York, 2001, xiv+398 pp.
 ISBN: 0-387-95296-9
18. *Log-linear models and logistic regression. Second Edition.*
Christensen, Ronald
 Springer Texts Statist.
 Springer-Verlag, New York, 1997, xvi+483 pp.
 ISBN: 0-387-98247-7
19. *Plane answers to complex questions. The theory of linear models. Second Edition.*
Christensen, Ronald

- Springer Texts Statist.
Springer-Verlag, New York, 1996, xviii+452 pp.
ISBN: 0-387-94767-1
20. *Linear models for multivariate, time series, and spatial data.*
Christensen, Ronald
Springer Texts Statist.
Springer-Verlag, New York, 1991, xii+317 pp.
ISBN: 0-387-97413-X
21. *Log-linear models.*
Christensen, Ronald
Springer Texts Statist.
Springer-Verlag, New York, 1990, xii+408 pp.
ISBN: 0-387-97398-2
22. *Plane answers to complex questions. The theory of linear models.*
Christensen, Ronald
Springer Texts Statist.
Springer-Verlag, New York, 1987, xiv+380 pp.
ISBN: 0-387-96487-8
23. *The KAM story.*
Dumas, H. Scott
World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2014, xvi+361 pp.
ISBN: 978-981-4556-58-3
24. *Hamiltonian dynamical systems. History, theory, and applications.*
Papers from the International Conference held at the University of Cincinnati, Cincinnati, Ohio, March 1992.
Edited by **H. S. Dumas**, K. R. Meyer and D. S. Schmidt
IMA Vol. Math. Appl., 63
Springer-Verlag, New York, 1995, xx+385 pp.
ISBN: 0-387-94437-0
25. *Multiphase averaging for classical systems. With applications to adiabatic theorems.*
Lochak, P.; Meunier, C.
Translated from the French by **H. S. Dumas**
Appl. Math. Sci., 72
Springer-Verlag, New York, 1988, xii+360 pp.
ISBN: 0-387-96778-8

26. *Mathemagical Cruise*
Hahn, Liong-shin
National Taiwan University Press, 2023
ISBN-13: 978-986-350-754-3
27. *Mathemagical Buffet.*
Hahn, Liong-shin
Ehgbooks, 2013, 250pp.
ISBN-13: 978-1647849535
28. *Honsberger Revisited: Mathematical Gems Polished.*
Hahn, Liong-shin
National Taiwan University Press, 2011
ISBN-13: 978-9860311684
29. *New Mexico Mathematics Contest Problem Book*
Hahn, Liong-shin
University of New Mexico Press, 2005, 214pp.
ISBN-13: 978-0826335349
30. *Classical Complex Analysis.*
Hahn Liang-shin; Epstein, Bernard
Jones and Bartlett, 1996, xi+411 pp.
ISBN: 0-86720-494-X
31. *Complex numbers and geometry.*
Hahn, Liang-shin
MAA Spectrum
Mathematical Association of America, Washington, DC, 1994, x+192 pp.
ISBN: 0-88385-510-0
32. *Humanizing mathematics and its philosophy.*
Essays celebrating the 90th birthday of **Reuben Hersh.**
Edited by Bharath Sriraman
Birkhäuser/Springer, Cham, 2017. x+363 pp.
ISBN:978-3-319-61230-0
33. *Peter Lax, mathematician.*
Hersh, Reuben
American Mathematical Society, Providence, RI, 2015, xxii+253 pp.
ISBN: 978-1-4704-1708-6

34. *Experiencing mathematics.*
Hersh, Reuben
 American Mathematical Society, Providence, RI, 2014, xviii+291 pp.
 ISBN: 978-0-8218-9420-0
35. *Loving + hating mathematics.*
Hersh, Reuben; John-Steiner, Vera
 Princeton University Press, Princeton, NJ, 2011, xii+416 pp.
 ISBN: 978-0-691-14247-0
36. *The mathematical experience, study edition.*
 Davis, Philip J.; **Hersh, Reuben**; Marchisotto, Elena Anne
 Mod. Birkhäuser Class.
 Birkhäuser/Springer, New York, 2012, xxvi+500 pp.
 ISBN: 978-0-8176-8294-1
37. *18 unconventional essays on the nature of mathematics.*
 Edited by **Reuben Hersh**
 Springer, New York, 2006. xxii+326 pp.
 ISBN: 978-0387-25717-4
38. *What is mathematics, really?*
Hersh, Reuben
 Oxford University Press, New York, 1997, xxiv+343 pp.
 ISBN: 0-19-511368-3
39. *The companion guide to the mathematical experience.*
 Davis, Philip J.; **Hersh, Reuben**; Marchisotto, Elena Anne
 Birkhäuser Boston, Inc., Boston, MA, 1995, viii+120 pp.
 ISBN: 0-8176-3849-0
40. *The mathematical experience.*
 Davis, Philip J.; **Hersh, Reuben**; Marchisotto, Elena Anne
 With an introduction by Gian-Carlo Rota. Study edition
 Birkhäuser Boston, Inc., Boston, MA, 1995, xxiv+487 pp.
 ISBN: 0-8176-3739-7
41. *Erfahrung Mathematik. (German) [The mathematical experience].*
 Davis, Philip J.; **Hersh, Reuben**
 Translated from the 1981 English original by Jeannette Zehnder. Revised reprint of
 the 1986 German edition. With an introduction by Hans Freudenthal
 Birkhäuser Verlag, Basel, 1994, xxvi+466 pp. ISBN: 3-7643-2996-3

42. *New directions in the philosophy of mathematics.*
 Papers from the symposium held at the Annual Meeting of the American Association
 for the Advancement of Science in New Orleans, Louisiana, February 20, 1990.
 Edited by **Reuben Hersh**
 Synthese88(1991), no.2, pp. 117–277.
43. *L’empire mathématique. (French) [Descartes’ dream]*
 Davis, Philip J.; **Hersh, Reuben**
 Translated from the English by Jean-Baptiste Grasset
 Gauthier-Villars, Montrouge, 1988, xvi+336 pp.
 ISBN: 2-04-016944-X
44. *Descartes’ dream.*
 Davis, Philip J.; **Hersh, Reuben**
 Harcourt Brace Jovanovich, Publishers, San Diego, CA, 1986, xx+321 pp.
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45. *L’univers mathématique. (French)[The mathematical experience]*
 Davis, Philip J.; **Hersh, Reuben**
 Translated from the English by Lucien Chambadal. With a preface by Gian-Carlo
 Rota
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46. *Erfahrung Mathematik (German) [The mathematical experience]*
 Davis, Philip J.; **Hersh, Reuben**
 Translated from the English by Jeannette Zehnder
 Offene Wissensch.[Open Science]
 Birkhäuser Verlag, Basel, 1984, 520 pp.
 ISBN: 3-7643-1359-5
47. *The mathematical experience.* Davis, Philip J.; **Hersh, Reuben**
 With an introduction by Gian-Carlo Rota. Reprint
 Houghton Mifflin Co., Boston, MA, 1982, xx+440 pp.
 ISBN: 0-395-32131-X
48. *The mathematical experience.*
 Davis, Philip J.; **Hersh, Reuben**
 Birkhäuser, Boston, MA, 1980, xv+440 pp.
 ISBN: 3-7643-3018-X

49. *Deterministic and Random Evolution (Mathematics Research Developments.)*
Jens Lorenz (Editor)
 Nova Science Pub Inc; UK ed. edition, 2013, 188pp
 ISBN-13: 978-1626180147
50. *Initial-boundary value problems and the Navier-Stokes equations.*
 Kreiss, Heinz-Otto; **Lorenz, Jens**
 Classics Appl. Math., 47 (Reprint of the 1989 edition.)
 Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 2004,
 xviii+402 pp.
 ISBN: 0-89871-565-2
51. *Dynamics of algorithms.*
 Proceedings of the IMA Workshop held in Minneapolis, MN, November 1997.
 Edited by Rafael de la Llave, Linda R. Petzold and **Jens Lorenz**
 IMA Vol. Math. Appl., 118
 Springer-Verlag, New York, 2000. x+136 pp.
 ISBN:0-387-98920-X
52. *Theory and numerical methods for initial-boundary value problems.*
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 Math. Comput. Modelling20(1994), no.10-11, pp. vii–xii and 1–213.
53. *Initial-boundary value problems and the Navier-Stokes equations.*
 Kreiss, Heinz-Otto; **Lorenz, Jens**
 Pure Appl. Math., 136
 Academic Press, Inc., Boston, MA, 1989, xii+402 pp.
 ISBN: 0-12-426125-6
54. MR1420863 - *Lifting solutions to perturbing problems in C^* -algebras.*
Loring, Terry A.
 Fields Inst. Monogr., 8
 American Mathematical Society, Providence, RI, 1997, x+165 pp.
 ISBN: 0-8218-0602-5
55. *R Companion for Sampling: Design and Analysis, Third Edition.*
Lu, Yan; Lohr, Sharon L.
 Routledge; 1st edition, 2021, 222 pp.
 ISBN-13: 978-1032135946

56. *Harmonic analysis, partial differential equations, Banach spaces, and operator theory. Vol. 2. Celebrating Cora Sadosky's life.*
 Edited by **María Cristina Pereyra**, Stefania Marcantognini, Alexander M. Stokolos and Wilfredo Urbina
 Assoc. Women Math. Ser., 5
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57. *Harmonic analysis, partial differential equations, complex analysis, Banach spaces, and operator theory. Vol. 1. Celebrating Cora Sadosky's life.*
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 ISBN: 978-3-319-30961-3; 978-3-319-30959-0
58. *Harmonic analysis. From Fourier to Wavelets.*
Pereyra, María Cristina; Ward, Lesley A.
 Stud. Math. Libr., 63. IAS/Park City Math. Subser.
 American Mathematical Society, Providence, RI Institute for Advanced Study (IAS), Princeton, NJ, 2012, xxiv+410 pp.
 ISBN: 978-0-8218-7566-7
59. *Wavelets, their friends, and what they can do for you.*
 Mohlenkamp, Martin J.; **Pereyra, María Cristina**
 EMS Ser. Lect. Math.
 European Mathematical Society (EMS), Zürich, 2008, x+109 pp.
 ISBN: 978-3-03719-018-0
60. *Practical Statistics for Decision Makers 1st Edition.*
Schild, Milo
 Wiley, 2023, 450pp.
 ISBN-13: 978-1119421115
61. *Statistical Literacy 2023: Critical Thinking about Everyday Statistics.*
Schild, Milo
 Kendall Hunt Publishing, 2023
 ISBN-13: 979-8765740583
62. *Statistical Literacy 2011: Seeing The Story Behind The Statistics.*
Schild, Milo
 Self-published, 2011. ISBN-13: 978-1450787413

63. *Multilinear operator integrals.*
Skripka, Anna; Tomskova, Anna
 Lecture Notes in Math., 2250
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64. *Applied and computational mathematics.*
 Selected papers from the 3rd PanAmerican Workshop held at the Universidad Nacional de Trujillo, Trujillo, April 24–28, 2000.
 Edited by José Castillo, Victor Pereyra and **Stanly Steinberg**
 Applied and computational mathematics (Trujillo, 2000)
 Appl. Numer. Math.40(2002), no.1-2, pp. iii–vi and 1–366.
65. *Computer algebra for dynamical systems and mechanics*
 Papers from the IMACS Conferences on Applications of Computer Algebra (ACA’98/ACA’99) held in Prague, August 9–11, 1998 and in El Escorial, June 25–27, 1999.
 Edited by V. Edneral and **S. Steinberg**
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66. *Non-standard applications of computer algebra. II*
 Selected papers from the 1997 and 1998 IMACS Applied Computer Algebra (ACA) Conferences held in Wailea, HI, 1997 and in Prague, 1998.
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67. *Simplification of systems of algebraic and differential equations with applications.*
 Edited by A. D. Bruno, V. F. Edneral and **S. Steinberg**
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68. *Non-standard applications of computer algebra.*
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69. *MR1300634 - Fundamentals of grid generation.*
 Knupp, Patrick; **Steinberg, Stanly**
 CRC Press, Boca Raton, FL, 1994, xviii+286 pp.
 ISBN: 0-8493-8987-9

70. *Improperly posed boundary value problems.*
 Conference on Improperly Posed Problems in Partial Differential Equations. Held at the University of New Mexico, Albuquerque, N.M., May, 1974.
 Edited by Alfred Carasso and **Alex P. Stone**
 Res. Notes in Math., No. 1
 Pitman Publishing, London-San Francisco, Calif.-Melbourne, 1975. vi+157 pp.
 ISBN:0-273-00105-1
71. *Extremals for the Sobolev inequality and the quaternionic contact Yamabe problem.*
 Ivanov, Stefan P.; **Vassilev, Dimitar N.**
 World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2011, xviii+219 pp.
 ISBN: 978-981-4295-70-3; 981-4295-70-1
72. *Progress in commutative algebra 2. Closures, finiteness and factorization.*
 Edited by Christopher Francisco, Lee Klingler, Sean Sather-Wagstaff and **Janet C. Vassilev**
 Walter de Gruyter GmbH & Co. KG, Berlin, 2012, x+315 pp.
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73. *Progress in commutative algebra 1. Combinatorics and homology.*
 Edited by Christopher Francisco, Lee Klingler, Sean Sather-Wagstaff and **Janet C. Vassilev**
 Walter de Gruyter & Co., Berlin, 2012, xii+361 pp.
 ISBN: 978-3-11-025034-3
74. *Spectral Theory, Sturm-Liouville Operators, and Applications.*
 Gesztesy, Fritz; **Zinchenko, Maxim**
 American Mathematical Society, Graduate Studies in Mathematics Book Series, Providence, RI. (Expected completion date 2024?).