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

Compiled by María Cristina Pereyra on September 16, 2023,
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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, Liong-shin 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.
   ISBN: 13 978-0721681504.

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. *Delta-invariant Theory for Hecke Correspondences.*
   Buium, Alexandru; Vasiu, Adrian
   Lecture Notes in Math. **2396**
   Springer, 2026. (a research monograph).
   Softcover ISBN 978-3-032-20570-4

5. *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

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Buium, Alexandru
Math. Surveys Monogr., 222
American Mathematical Society, Providence, RI, 2017, x+344 pp.
(reprinted in 2023).
ISBN: 978-1-4704-3623-0

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

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

9. *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

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

11. *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

12. *Log-Linear Models and Logistic Regression.Third Edition.*
Christensen, Ronald
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Springer Cham, New York, 2025, xxi+545 pp.
ISBN: 978-3-031-69038-9; 978-3-031-69037-2; 978-3-031-69040-2

13. *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

14. *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

15. *Plane answers to complex questions. The theory of linear models. Fourth Edition.*
Christensen, Ronald
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16. *Bayesian ideas and data analysis.*
Christensen, Ronald; Johnson, Wesley; Branscum, Adam; Hanson, Timothy E.
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CRC Press, Boca Raton, FL, 2011, xviii+498 pp.
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17. *Plane answers to complex questions. The theory of linear models. Third Edition.*
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Springer-Verlag, New York, 2002, xx+473 pp.
ISBN: 0-387-95361-2

18. *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

19. *Log-linear models and logistic regression. Second Edition.*
Christensen, Ronald
Springer Texts Statist.
Springer-Verlag, New York, 1997, xvi+483 pp.
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20. *Plane answers to complex questions. The theory of linear models. Second Edition.*
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21. *Linear models for multivariate, time series, and spatial data.*
Christensen, Ronald
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22. *Log-linear models.*
Christensen, Ronald
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23. *Plane answers to complex questions. The theory of linear models.*
Christensen, Ronald
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Springer-Verlag, New York, 1987, xiv+380 pp.
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24. *The KAM story.*
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World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2014, xvi+361 pp.
ISBN: 978-981-4556-58-3

25. *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

26. *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

27. *Riemannian Topology and Geometric Structures on Manifolds.*
Galicki, Krzysztof, **Santiago R. Simanca** (editors).
Progress in Mathematics (PM, volume 271), Birkhäuser, 2008, xvi+296 pp.
ISBN: 978-0-8176-4742-1
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28. *Mathemagical Cruise*
Hahn, Liong-shin
National Taiwan University Press, 2023
ISBN-13: 978-986-350-754-3

29. *Mathemagical Buffet.*
Hahn, Liong-shin
Ehgbooks, 2013, 250pp.
ISBN-13: 978-1647849535

30. *Honsberger Revisited: Mathematical Gems Polished.*
Hahn, Liong-shin
National Taiwan University Press, 2011
ISBN-13: 978-9860311684

31. *New Mexico Mathematics Contest Problem Book*
Hahn, Liong-shin
University of New Mexico Press, 2005, 214pp.
ISBN-13: 978-0826335349

32. *Classical Complex Analysis.*
Hahn Liang-shin; **Epstein, Bernard**
Jones and Bartlett, 1996, xi+411 pp.
ISBN: 0-86720-494-X

33. *Complex numbers and geometry.*
Hahn, Liang-shin
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ISBN: 0-88385-510-0

34. *Humanizing mathematics and its philosophy.*
Essays celebrating the 90th birthday of **Reuben Hersh.**
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Birkhäuser/Springer, Cham, 2017. x+363 pp.
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35. *Peter Lax, mathematician.*
Hersh, Reuben
American Mathematical Society, Providence, RI, 2015, xxii+253 pp.
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36. *Experiencing mathematics.*
Hersh, Reuben
American Mathematical Society, Providence, RI, 2014, xviii+291 pp.
ISBN: 978-0-8218-9420-0

37. *Loving + hating mathematics.*
Hersh, Reuben; John-Steiner, Vera
Princeton University Press, Princeton, NJ, 2011, xii+416 pp.
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38. *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

39. *18 unconventional essays on the nature of mathematics.*
Edited by **Reuben Hersh**
Springer, New York, 2006. xxii+326 pp.
ISBN: 978-0387-25717-4

40. *What is mathematics, really?*
Hersh, Reuben
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Davis, Philip J.; **Hersh, Reuben**; Marchisotto, Elena Anne
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43. *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

44. *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.
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45. *L'empire mathématique.(French) [Descartes' dream]*
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46. *Descartes' dream.*
Davis, Philip J.; **Hersh, Reuben**
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47. *L'univers mathématique. (French)[The mathematical experience]*
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48. *Erfahrung Mathematik (German) [The mathematical experience]*
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Offene Wissensch.[Open Science]
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ISBN: 3-7643-1359-5

49. *The mathematical experience.* Davis, Philip J.; **Hersh, Reuben**
With an introduction by Gian-Carlo Rota. Reprint
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50. *The mathematical experience.*
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51. *Deterministic and Random Evolution (Mathematics Research Developments.)*
Jens Lorenz (Editor)
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52. *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

53. *Dynamics of algorithms.*
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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

54. *Theory and numerical methods for initial-boundary value problems.*
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Math. Comput. Modelling **20**, 1994, no.10/11, xii+213 pp.

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56. MR1420863 - *Lifting solutions to perturbing problems in C^*-algebras.*
Loring, Terry A.
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ISBN: 978-3-319-30961-3; 978-3-319-30959-0

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Pereyra, María Cristina; Ward, Lesley A.
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62. *Practical Statistics for Decision Makers 1st Edition.*
Schield, Milo
Wiley, 2023, 450pp.
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63. *Statistical Literacy 2023: Critical Thinking about Everyday Statistics.*
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Self-published, 2011. ISBN-13: 978-1450787413

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69. *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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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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Walter de Gruyter & Co., Berlin, 2012, xii+361 pp.
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77. *Spectral Theory, Sturm-Liouville Operators, and Applications.*
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