

Publications of William H. Press

1. W.H. Press and J.M. Bardeen, "Nonconservation of the Newman-Penrose Conserved Quantities," *Phys. Rev. Lett.*, **27**, 1303 (1971).
2. M. Davis, R. Ruffini, W. Press and R. Price, "Gravitational Radiation from a Particle Falling Radially into a Schwarzschild Black Hole," *Phys. Rev. Lett.*, **27**, 1466 (1971).
3. W.H. Press, "Long Wave-Trains of Gravitational Waves from a Vibrating Black Hole," *Astrophys. J. (Lett.)*, **170**, L105 (1971).
4. W.H. Press, "Time Evolution of a Rotating Black Hole Immersed in a Static Scalar Field," *Astrophys. J.*, **175**, 243 (1972).
5. W.H. Press and K.S. Thorne, "Gravitational-Wave Astronomy," *Ann. Rev. Astron. Astrophys.*, **10**, 335 (1972).
6. J.M. Bardeen, W.H. Press, and S.A. Teukolsky, "Rotating Black Holes: Locally Nonrotating Frames, Energy Extraction, and Scalar Synchrotron Radiation," *Astrophys. J.*, **178**, 347 (1972).
7. W.H. Press and S.A. Teukolsky, "Floating Orbits, Superradiant Scattering and the Black-Hole Bomb," *Nature*, **238**, 211 (1972).
8. J.M. Bardeen and W.H. Press, "Radiation Fields in the Schwarzschild Background," *J. Math. Phys.*, **14**, 7 (1973).
9. W.H. Press and S.A. Teukolsky, "On the Evolution of the Secularly Unstable, Viscous Maclaurin Spheroids," *Astrophys. J.*, **181**, 513 (1973).
10. W.H. Press, "Black-Hole Perturbations: An Overview," in Proceedings of the Sixth Texas Symposium on Relativistic Astrophysics, *Ann. N.Y. Acad. Sci.*, **224**, 272 (1973).
11. W.H. Press and S.A. Teukolsky, "Perturbations of a Rotating Black Hole. II. Dynamical Stability of the Kerr Metric," *Astrophys. J.* **185**, 649 (1973).
12. W.H. Press and J.E. Gunn, "Method for Detecting a Cosmological Density of Condensed Objects," *Astrophys. J.*, **185**, 397 (1973).
13. W.H. Press and P. Schechter, "Formation of Galaxies and Clusters of Galaxies by Self-Similar Gravitational Condensation," *Astrophys. J.*, **187**, 425 (1974).
14. W.H. Press, "Algorithm for Complementary Error Function," *Kellogg Laboratory Progress Report*, California Institute of Technology, (May 1974).
15. S.A. Teukolsky and W.H. Press, "Perturbations of a Rotating Black Hole, III. Interactions of the Hole with Electromagnetic and Gravitational Radiation," *Astrophys. J.*, **193**, 443 (1974).
16. W.H. Press and P. Schechter, "Remark on the Statistical Significance of Flares in Poisson Count Data," *Astrophys. J.*, **193**, 437 (1974).

17. W.H. Press, "Exotic Black-Hole Processes," in *Gravitation and Relativity*, Proceedings of the 7th International Conference on General Relativity and Gravitation, G. Shaviv and J. Rosen, eds. (Wiley, 1975).
18. D.M. Eardley and W.H. Press, "Astrophysical Processes near Black Holes," *Ann. Rev. Astron. Astrophys.*, **13**, 381 (1975).
19. A.P. Lightman, W.H. Press, R.H. Price, and S.A. Teukolsky, *Problem Book in Relativity and Gravitation*, with complete solutions 599 pp. + xiv (Princeton University Press, 1975); also Russian-language translation: Moscow, Mir Publishers, 1979.
20. W.H. Press, "On the Relative Importance of Phase and Frequency Information in Pulsar Timing Measurements," *Astrophys. J.*, **200**, 182 (1975).
21. P. Schechter and W.H. Press, "Method for Determining Maximum Likelihood Distance Moduli for Groups of Galaxies," *Astrophys. J.*, **203**, 557 (1976).
22. W.H. Press, "On Estimating the Unprojected Luminosity Density within a Cluster of Galaxies," *Astrophys. J.*, **203**, 15 (1976).
23. W.H. Press, "Exact Evolution of Photons in an Anisotropic Cosmology with Scattering," *Astrophys. J.*, **205**, 311 (1976).
24. W.H. Press, P.J. Wiita, and L.L. Smarr, "Mechanism for Inducing Synchronous Rotation and Small Eccentricity in Close Binary Systems," *Astrophys. J. (Lett.)*, **202**, L135 (1975).
25. P.J. Wiita and W.H. Press, "Mass, Angular-Momentum Regimes for Certain Instabilities of a Compact, Rotating Stellar Core," *Astrophys. J.*, **208**, 525 (1976).
26. W.H. Press, "A 'Foil' for Gravitational Clustering Investigations," *Astron. Astrophys.*, **48**, 149 (1976).
27. W.H. Press, "Theoretical Maximum for Energy from Direct and Diffuse Sunlight" *Nature*, **264**, 734 (1976).
28. P.S. Marcus and W.H. Press, "On Green's Functions for Small Disturbances of Plane Couette Flow," *J. Fluid Mech.*, **79**, 525 (1977).
29. W.H. Press and S.A. Teukolsky, "On Formation of Close Binaries by Two-Body Tidal Capture," *Astrophys. J.*, **213**, 183 (1977).
30. P.S. Marcus, W.H. Press, and S.A. Teukolsky, "Stablest Shapes for an Axisymmetric Body of Gravitating, Incompressible Fluid," *Astrophys. J.*, **214**, 584 (1977).
31. W.H. Press, "On Gravitational Radiation from Sources which Extend into Their Own Wave Zone," *Phys. Rev. D.*, **15**, 965 (1977).
32. A.P. Lightman, W.H. Press, and S.F. Odenwald, "Present and Past Death Rates for Globular Clusters," *Astrophys. J.*, **219**, 629 (1978).
33. W.H. Press, "Flicker Noises in Astronomy and Elsewhere," *Comments on Astrophysics*, **7**, 103 (1978).

34. L.L. Smarr and W.H. Press, "Our Elastic Spacetime: Black Holes and Gravitational Waves," *American Scientist*, **66**, 72 (1978); also reply to letter, *op. cit.* **66**, 406 (1978).
35. W.H. Press and A.P. Lightman, "Possible Role of Collective Relaxation in Galaxy Correlations," *Astrophys. J. (Lett.)*, **219**, L73 (1978).
36. A.P. Lightman and W.H. Press, "Time Evolution of Galaxy Correlations in a Model for Gravitational Instability," *Astrophys. J.*, **225**, 667 (1978).
37. W.H. Press, "Mathematical Theory of the Waterbed," *Am. J. Phys.*, **46**, 966 (1978).
38. W.H. Press, "On Gravitational Conductors, Waveguides, and Circuits," *General Relativity and Gravitation*, **11**, 105 (1979).
39. W.H. Press, "Hierarchical Modification of Successive Over-Relaxation for 'Fast' Convergence of Elliptic Systems with General Boundaries," Center for Astrophysics Preprint No. 971 (1978).
40. B.P. Flannery and W.H. Press, "An Ionization-Coupled Acoustic Instability of the Interstellar Medium," *Astrophys. J.*, **231**, 688 (1979).
41. W.H. Press and E.T. Vishniac, "Production of New Cosmological Perturbations during the Radiation-Dominated Era," *Nature*, **279**, 137 (1979).
42. W.H. Press and E.T. Vishniac, "Propagation of Adiabatic Cosmological Perturbations through the Era of Matter-Radiation Decoupling," *Astrophys. J.*, **236**, 323 (1980).
43. W.H. Press, "Spontaneous Production of the Zel'dovich Spectrum of Cosmological Fluctuations," *Physica Scripta*, **21**, 702 (1980).
44. W.H. Press, "Man's Size in Terms of Fundamental Constants," *Am. J. Phys.*, **48**, 597 (1980).
45. W.H. Press and E.T. Vishniac, "Tenacious Myths about Cosmological Perturbations Larger than the Horizon Size," *Astrophys. J.*, **239**, 1 (1980).
46. S.L.W. McMillan, B.P. Flannery, and W.H. Press, "Nonlinear Hydrodynamics of Acoustic Instabilities in Diffuse Clouds," *Astrophys. J.*, **240**, 488 (1980).
47. W.H. Press, "Turbulent Erosion of a Stably Stratified Fluid as a Test of Intermittency Models," *J. Fluid Mech.*, **107**, 455 (1981).
48. W.H. Press, "Radiative and Other Effects from Internal Waves in Solar and Stellar Interiors," *Astrophys. J.*, **245**, 286 (1981).
49. W.H. Press and G.B. Rybicki, "Enhancement of Passive Diffusion and Suppression of Heat Flux in a Fluid with Time-Varying Shear," *Astrophys. J.*, **248**, 751 (1981).
50. W.H. Press, "The Age and Structure of the Universe: A Tale of Two Theories," in *Revealing the Universe: Prediction and Proof in Astronomy*, J. Cornell and A.P. Lightman, eds. (MIT Press, 1982).
51. W.H. Press, "Hydrodynamic and Hydromagnetic Phenomena in the Deep Solar Interior," Chapter 4 of *The Physics of the Sun*, Vol. 1, eds. P. Sturrock, T. Holtzer, D. Mihalas, R. Ulrich (Dordrecht: Reidel, 1986), pp. 77–95.

52. W.H. Press, "Galaxies May Be Single Particle Fluctuations from an Early, False-Vacuum Era," in *Cosmology and Particles, Proceedings of the Moriond Astrophysics Meeting 1981*, J. Audouze et al., eds., (Dreux, France: Editions Frontieres, 1981).
53. W.H. Press and M. Davis, "How to Identify and Weigh Virialized Clusters of Galaxies in a Complete Redshift Catalog," *Astrophys. J.*, **259**, 449 (1982).
54. P.S. Marcus, W.H. Press, and S.A. Teukolsky, "Multi-Scale Model Equations for Turbulent Convection and Convective Overshoot," *Astrophys. J.*, **267**, 795 (1983).
55. W.H. Press, "Remarks on Fitting the Cosmic Velocity Field and on 'Best' Tully-Fisher Relations," *Astrophys. J.* (submitted).
56. W.H. Press, "Semiclassical Formulation of Hawking Radiation in an Inflationary Universe," in *Numerical Astrophysics*, J.M. Centrella et al., eds. (Boston: Jones and Bartlett, 1985).
57. R. Brandenberger, R. Kahn, and W.H. Press, "Cosmological Perturbations in the Early Universe," *Phys. Rev. D*, **28**, 1809 (1983).
58. W.H. Press and A.P. Lightman, "Dependence of Macrophysical Phenomena on the Values of the Fundamental Constants," *Phil. Trans. R. Soc. Lond. A*, **310**, 323 (1983).
59. D.N. Spergel and W.H. Press, "Effect of Hypothetical, Weakly-Interacting, Massive Particles on Energy Transport in the Solar Interior," *Astrophys. J.*, **294**, 663 (1985).
60. W.H. Press and D.N. Spergel, "Capture by the Sun of a Galactic Population of Weakly-Interacting, Massive Particles," *Astrophys. J.*, **296**, 679 (1985).
61. L.M. Krauss, K. Freese, D.N. Spergel, and W.H. Press, "Cold Dark Matter Candidates and the Solar Neutrino Problem," *Astrophys. J.*, **299**, 1001 (1985).
62. W.T. Vetterling, S.A. Teukolsky, W.H. Press, and B.P. Flannery, *Numerical Recipes Example Book (FORTRAN)*, 179 pp. + ix (New York: Cambridge University Press, 1985).
63. W.T. Vetterling, S.A. Teukolsky, W.H. Press, and B.P. Flannery, *Numerical Recipes Example Book (Pascal)*, 233 pp. + ix (New York: Cambridge University Press, 1985). Also, Revised Edition (1989).
64. W.H. Press, B.P. Flannery, S.A. Teukolsky, and W.T. Vetterling, *Numerical Recipes: The Art of Scientific Computing*, 818 pp. + xvi (New York: Cambridge University Press, 1986).
65. W.H. Press, "Cosmic Dark Matter and Solar Neutrinos: The Invisible Explains the Missing (or Vice Versa)," in *Cosmogonical Processes*, D. Arnett, C. Hansen, S. Tsuruta, eds. (Utrecht: VNU Science Press, 1986).
66. R.L. Gilliland, J. Faulkner, W.H. Press, and D.N. Spergel, "Solar Models with Energy Transport by Weakly-Interacting Particles," *Astrophys. J.*, **306**, 703 (1986).
67. L.M. Krauss, A.H. Guth, D.N. Spergel, G.B. Field, and W.H. Press, "Inflation and Shadow Matter," *Nature*, **319**, 748 (1986).

68. W.H. Press, "Techniques and Tricks for N-Body Computation," in *The Use of Supercomputers in Stellar Dynamics*, P. Hut and S. McMillan, eds., Springer Lecture Notes in Physics **267** (New York: Springer, 1986).
69. J.N. Bahcall, G.B. Field, and W.H. Press, "Is Neutrino Capture Rate Correlated with Sunspot Number?", *Astrophys. J. (Letters)*, **320**, L69 (1987).
70. J.N. Bahcall, T. Piran, W.H. Press, and D.N. Spergel, "Neutrino Temperatures and Fluxes from the LMC Supernova," *Nature*, **327**, 682 (1987).
71. W.H. Press and C.G. Callan, Jr., "The 'EGASP' Method for Travelling Salesman-Like Resource Allocation Problems," *J. Guidance, Control, & Dynamics*, **11**, 394 (1988).
72. W.H. Press and D.N. Spergel, "Choice of Order and Extrapolation Method in Aarseth-Type N-Body Algorithms," *Astrophys. J.*, **325**, 715 (1988).
73. W.H. Press and D.N. Spergel, "An Introduction to Inflation," in *Dark Matter in the Universe*, Jerusalem Winter School for Theoretical Physics, Volume 4, J. Bahcall, T. Piran, S. Weinberg, eds. (Singapore: World Scientific, 1988), pp. 197–205.
74. W.H. Press and D.N. Spergel, "WIMPs in the Sun and in the Lab," in *Dark Matter in the Universe*, Jerusalem Winter School for Theoretical Physics, Volume 4, J. Bahcall, T. Piran, S. Weinberg, eds. (Singapore: World Scientific, 1988), pp. 206–217.
75. W.H. Press and D.N. Spergel, "An Introduction to Cosmic Strings," in *Dark Matter in the Universe*, Jerusalem Winter School for Theoretical Physics, Volume 4, J. Bahcall, T. Piran, S. Weinberg, eds. (Singapore: World Scientific, 1988), pp. 218–230.
76. J.N. Bahcall, D.N. Spergel, and W.H. Press, "Phenomenological Analysis of Neutrino Emission from SN 1987A," in *Proceedings of Supernova 1987A*, George Mason University, (1988).
77. W.H. Press, B.P. Flannery, S.A. Teukolsky, and W.T. Vetterling, *Numerical Recipes in C: The Art of Scientific Computing*, 735 pp. + xxii (New York: Cambridge University Press, 1988).
78. W.T. Vetterling, S.A. Teukolsky, W.H. Press, and B.P. Flannery, *Numerical Recipes Example Book (C)*, 225 pp. + ix (New York: Cambridge University Press, 1988).
79. D.N. Spergel, W.H. Press, and R.J. Scherrer, "Self-Excited Cosmic String Dynamoes," *Nature*, **334**, 682 (1988).
80. W.H. Press and S.A. Teukolsky, "Kolmogorov-Smirnov Test for Two-Dimensional Data," *Computers in Physics*, **2**, No. 4 (Jul/Aug), 74 (1988).
81. W.H. Press and S.A. Teukolsky, "Evaluating Continued Fractions and Computing Exponential Integrals," *Computers in Physics*, **2**, No. 5 (Sep/Oct), 88 (1988).
82. W.H. Press and S.A. Teukolsky, "Search Algorithm for Weak Periodic Signals in Unevenly Spaced Data," *Computers in Physics*, **2**, No. 6 (Nov/Dec), 77 (1988).
83. W.H. Press and S.A. Teukolsky, "Computing Accurate Integrals with the FFT," *Computers in Physics*, **3**, No. 1 (Jan/Feb), 91, (1989).

84. R.J. Scherrer and W.H. Press, "Cosmic String Loop Fragmentation," *Phys. Rev. D*, **39**, 371 (1989).
85. A.P. Lightman and W.H. Press, "Surfaces of Constant Redshift in an Inflationary Universe," *Astrophys. J.*, **337**, 598 (1989).
86. W.H. Press and G.B. Rybicki, "Fast Algorithm for Spectral Analysis of Unevenly Sampled Data," *Astrophys. J.*, **338**, 277 (1989).
87. W.H. Press and D.N. Spergel, "Cosmic Strings: Topological Fossils of the Hot Big Bang," *Physics Today*, **42**, No. 3, 29 (1989).
88. D.N. Spergel, W.H. Press, and R.J. Scherrer, "Electromagnetic Self-Interaction of Superconducting Cosmic Strings," *Phys. Rev. D*, **39**, 379 (1989).
89. W.H. Press and S.A. Teukolsky, "Integrating Stiff Ordinary Differential Equations," *Computers in Physics*, **3**, No. 3 (May/June), 88 (1989).
90. W.H. Press, B.S. Ryden, and D.N. Spergel, "Dynamical Evolution of Domain Walls in an Expanding Universe," *Astrophys. J.*, **347**, 590, (1989).
91. W.H. Press and S.A. Teukolsky, "Cyclic Redundancy Checks for Data Integrity or Identity," *Computers in Physics*, **3**, No. 4 (July/August), 88 (1989).
92. W.H. Press and S.A. Teukolsky, "Fourier Transforms of Real Data in Two and Three Dimensions," *Computers in Physics*, **3**, No. 5 (September/October), 84 (1989).
93. W.H. Press, B.P. Flannery, S.A. Teukolsky, and W.T. Vetterling, *Numerical Recipes in Pascal: The Art of Scientific Computing*, 759 pp. + xxii (New York: Cambridge University Press, 1989).
94. W.H. Press and S.A. Teukolsky, "Quasi (that is, Sub-) Random Sequences," *Computers in Physics*, **3**, No. 6 (November/December), 76 (1989).
95. W. Benz, R.L. Bowers, A.G.W. Cameron, and W.H. Press, "Dynamic Mass Exchange in Doubly Degenerate Binaries, I." *Astrophys. J.*, **348**, 647 (1990).
96. W.H. Press and S.A. Teukolsky, "Elliptic Integrals," *Computers in Physics*, **4**, 92 (1990).
97. W.H. Press, B.S. Ryden, and D.N. Spergel, "Single Mechanism for Generating Large Scale Structure and Providing Dark Missing Matter," *Phys. Rev. Lett.*, **64**, 1084 (1990).
98. B.S. Ryden, W.H. Press, and D.N. Spergel, "The Evolution of Networks of Domain Walls and Cosmic Strings," *Astrophys. J.*, **357**, 293 (1990).
99. W.H. Press and G.R. Farrar, "Recursive Stratified Sampling for Multidimensional Monte Carlo Integration," *Computers in Physics*, **4**, 190 (1990).
100. W.H. Press and S.A. Teukolsky, "Hypergeometric Functions by Direct Path Integration," *Computers in Physics*, **4**, 320 (1990).
101. W.H. Press and S.A. Teukolsky, "Orthogonal Polynomials and Gaussian Quadrature with Nonclassical Weight Functions," *Computers in Physics*, **4**, 423 (1990).

102. R.J. Scherrer, J.M. Quashnock, D.N. Spergel, and W.H. Press, "Properties of Realistic Cosmic String Loops," *Phys. Rev. D*, **42**, 1908 (1990).
103. W.H. Press and S.A. Teukolsky, "Fredholm and Volterra Integral Equations of the Second Kind," *Computers in Physics*, **4**, 554 (1990).
104. W.H. Press and S.A. Teukolsky, "Savitzky-Golay Smoothing Filters," *Computers in Physics*, **4**, 669 (1990).
105. D. Spergel, N. Turok, W.H. Press, and B.S. Ryden, "Global Texture as the Origin of Large Scale Structure: Numerical Simulations of Evolution," *Phys. Rev. D*, **43**, 1038 (1991).
106. W.H. Press and S.A. Teukolsky, "Numerical Calculation of Derivatives," *Computers in Physics*, **5**, 68 (1991).
107. L.L. Smarr and W.H. Press, "Astronomical Computing in the 1990s: The Bahcall Committee Report," *Computers in Physics*, **5**, 180 (1991).
108. J.N. Bahcall and W.H. Press, "Solar-Cycle Modulation of Event Rates in the Chlorine Solar Neutrino Experiment," *Astrophys. J.*, **370**, 730 (1991).
109. W.H. Press and S.A. Teukolsky, "Bessel Functions of Fractional Order," *Computers in Physics*, **5**, 244 (1991).
110. C.F. McKee and W.H. Press, "Theoretical Astrophysics," *Physics Today*, **44**, No. 4, 69 (1991).
111. W.H. Press and S.A. Teukolsky, "Modified Bessel Functions of Fractional Order," *Computers in Physics*, **5**, 330 (1991).
112. W.H. Press and S.A. Teukolsky, "Simulated Annealing Optimization over Continuous Control Spaces," *Computers in Physics*, **5**, 426 (1991).
113. W.H. Press and S.A. Teukolsky, "Multigrid Methods for Boundary Value Problems. I," *Computers in Physics*, **5**, 514 (1991); "Multigrid Methods for Boundary Value Problems. II," *op. cit.*, **5**, 626 (1991);
114. W.H. Press, G.B. Rybicki, and J.N. Hewitt, "The Time Delay of Gravitational Lens 0957+561. I. Methodology, and Analysis of Optical Photometric Data," *Astrophys. J.*, **385**, 404 (1992).
115. W.H. Press, G.B. Rybicki, and J.N. Hewitt, "The Time Delay of Gravitational Lens 0957+561. II. Analysis of Radio Data, and Combined Optical-Radio Analysis," *Astrophys. J.*, **385**, 416 (1992).
116. W.H. Press and S.A. Teukolsky, "Padé Approximants," *Computers in Physics*, **6**, 82 (1992).
117. W.H. Press and S.A. Teukolsky, "Adaptive Stepsize Runge-Kutta Integration," *Computers in Physics*, **6**, 188 (1992).
118. W.H. Press and S.A. Teukolsky, "Fitting Straight Line Data with Errors in Both Coordinates," *Computers in Physics*, **6**, 274 (1992).

119. W.H. Press and S.A. Teukolsky, "Biconjugate Gradient Method for Sparse Linear Systems," *Computers in Physics*, **6**, 274 (1992).
120. W.H. Press, "Wavelet-Based Compression Software for FITS Images," in *Astronomical Data Analysis Software and Systems, I*, D.M. Worrall, C. Biemesderfer, J. Barnes, eds., Astron. Soc. Pac. Conf. Series, **25**, 3, (1992).
121. S.M. Carroll, W.H. Press, and E.L. Turner, "The Cosmological Constant," *Annu. Rev. Astron. Astrophys.*, **30**, 499 (1992).
122. G.B. Rybicki and W.H. Press, "Interpolation, Realization, and Reconstruction of Noisy, Irregularly Sampled Data," *Astrophys. J.*, **398**, 169 (1992).
123. M.H. Freedman and W.H. Press, "Truncation of Wavelet Matrices: Edge Effects and the Reduction of Topological Control," *J. Linear Algebra and Applications*, **234**, 1 (1996).
124. W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, *Numerical Recipes in FORTRAN, Second Edition*, 963pp. + xxvi (New York: Cambridge University Press, 1992).
125. W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, *Numerical Recipes in C, Second Edition*, 1007pp. + xxvi (New York: Cambridge University Press, 1992).
126. W.H. Press and S.A. Teukolsky, "Portable Random Number Generators," *Computers in Physics*, **6**, 522 (1992).
127. W.H. Press and S.A. Teukolsky, "Fresnel Integrals, Cosine and Sine Integrals," *Computers in Physics*, **6**, 670 (1992).
128. W.H. Press and G.B. Rybicki, "Large-Scale Linear Methods for Interpolation, Realization, and Reconstruction of Noisy, Irregularly Sampled Data," in *Predicting the Future and Understanding the Past: a Comparison of Approaches*, A.S. Weigend and N.A. Gershenfeld, eds. (Reading, MA: Addison-Wesley, 1993).
129. W.H. Press, G.B. Rybicki, and D.P. Schneider, "Properties of High-Redshift Lyman Alpha Clouds. I. Statistical Analysis of the SSG Quasars," *Astrophys. J.*, **414**, 64 (1993).
130. W.H. Press and G.B. Rybicki, "Properties of High-Redshift Lyman Alpha Clouds. II. Statistical Properties of the Clouds," *Astrophys. J.*, **418**, 585 (1993).
131. G.B. Rybicki and W.H. Press, "A Class of Fast Methods for Processing Irregularly Sampled or Otherwise Inhomogeneous One-Dimensional Data," *Phys. Rev. Lett.*, **74**, 1060 (1995).
132. A.G. Riess, W.H. Press, and R.P. Kirshner, "Using SN Ia Light Curve Shapes to Measure The Hubble Constant," *Astrophys. J. (Lett.)*, **438**, L17 (1995).
133. A.G. Riess, W.H. Press, and R.P. Kirshner, "Determining the Motion of the Local Group Using SN Ia Light Curve Shapes," *Astrophys. J. (Lett.)*, **445**, L91 (1995).

134. W.H. Press, "Prognosticating the Future of Gravitational Lenses," in *Astrophysical Applications of Gravitational Lensing*, Proceedings of IAU Symposium 173, C.S. Kochanek and J.N. Hewitt, eds. (Dordrecht: Kluwer, 1996).
135. W.H. Press, "Understanding Data Better with Bayesian and Global Statistical Methods," in *Unsolved Problems in Astrophysics*, J.N. Bahcall and J.P. Ostriker, eds. (Princeton: Princeton University Press, 1997), also in astro-ph/9604126.
136. G.F.R. Ellis, J. Ehlers, S. van den Bergh, R.P. Kirshner, F-K Thielemann, G. Börner, W.H. Press, G. Raffelt, T. Buchert, and C. Hogan, "What Do We Really Know about the Global Structure of the Universe?" in *The Evolution of the Universe*, Dahlem Workshop Report, G. Börner and S. Gottlöber, eds., (Chichester, UK: Wiley, 1997).
137. W.H. Press, "Introduction to Parallel Programming," in *Computational Physics*, Proceedings of the Ninth Physics Summer School at the Australian National University, H.J. Gardner, and C.M. Savage, eds. (Singapore: World Scientific Publishing Co.), 1997.
138. A.G. Riess, W.H. Press, and R.P. Kirshner, "A Precise Distance Indicator: Type Ia Supernova Multicolor Light Curve Shapes," *Astrophys. J.*, **473**, 88 (1996).
139. A.G. Riess, W.H. Press, and R.P. Kirshner, "Is the Dust Obscuring Supernovae in Distant Galaxies the Same as Dust in the Milky Way?" *Astrophys. J.*, **473**, 588 (1996).
140. W.H. Press, S.A. Teukolsky, W.T. Vetterling, B.P. Flannery, *Numerical Recipes in Fortran 90: The Art of Parallel Scientific Computing*, Volume 2 of Fortran Numerical Recipes, Second Edition (New York: Cambridge University Press, 1996).
141. W.H. Press and G.B. Rybicki, "Desperately Seeking Non-Gaussianity: The Light Curve of 0957+561", in *Astronomical Time Series*, Proceedings of the Wise Observatory 25th Anniversary Symposium; D. Maoz, A. Sternberg, and E.M. Leibowitz, eds. (Dordrecht: Kluwer), 1997.
142. W.H. Press and S.A. Teukolsky, "Numerical Recipes: Does This Paradigm Have a Future?," *Computers in Physics*, **11**, 416 (1997).
143. B.C. Bromley, W.H. Press, H. Lin, and R.P. Kirshner, "Spectral Classification and Luminosity Function of Galaxies in the Las Campanas Redshift Survey," *Astrophys. J.*, **505**, 26 (1998).
144. W.H. Press and G.B. Rybicki, "Magnification Ratio of the Fluctuating Light in Gravitational Lens 0957+561," *Astrophys. J.*, **507**, 108 (1998).
145. B.C. Bromley, W.H. Press, H. Lin, R.P. Kirshner, "Density-Dependent Luminosity Functions for Galaxies in the Las Campanas Redshift Survey," astro-ph/ 9805197 (1998).
146. W.H. Press, "Table-Top Model for Black Hole Electromagnetic Instabilities," in *Black Holes and High Energy Astrophysics*, Proceedings of the XLIX Yamada

- Conference in Kyoto, Japan, April, 1998, p. 235 (Tokyo: Universal Academy Press).
147. W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, *Numerical Recipes in C++, Second Edition*, 1002pp. + xxviii (New York: Cambridge University Press, 2002).
 148. W.T. Vetterling, S.A. Teukolsky, W.H. Press, and B.P. Flannery, *Numerical Recipes Example Book (C++)*, 228 pp. + ix (New York: Cambridge University Press, 2002).
 149. H. Robins and W.H. Press, "Human microRNAs Target a Functionally Distinct Population of Genes with AT-rich 3' UTRs," *PNAS*, **102**, 15557-15562 (2005).
 150. W.H. Press and H. Robins, "Isochores Exhibit Evidence of Genes Interacting With the Large-Scale Genomic Environment," *Genetics*, **174**, 1029-1040 (2006).
 151. W.H. Press, "Discrete Radon Transform Has an Exact, Fast Inverse and Generalizes to Operations Other Than Sums along Lines," *PNAS*, **103**, 19249–19254 (2006).
 152. W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, *Numerical Recipes: The Art of Scientific Computing*, Third Edition, 1235 pp. + xxi (New York: Cambridge University Press, 2007).
 153. W.H. Press, "Strong profiling is not mathematically optimal for discovering rare malfeasors," *PNAS*, **106**, 1716-1719 (2009).
 154. W.H. Press, "Bandit solutions provide unified ethical models for randomized clinical trials and comparative effectiveness research," *PNAS*, **106**, 22387-22392 (2009).
 155. W.H. Press, "To catch a terrorist: can ethnic profiling work?," *Significance*, **7** (4), 164-167 (2010).
 156. W.H. Press and F.J. Dyson, "Iterated Prisoner's Dilemma contains strategies that dominate any evolutionary opponent," *PNAS*, **109** (26), 10409-10413 (2012).
 157. W.H. Press, "Editorial: Investing in Distant Rewards," *Science*, **339**, 627 (2013).
 158. W.H. Press, "Harold Agnew, physicist, atomic bomb Everyman," *PNAS*, **110** (48), 19179-19180 (2013).
 159. W.H. Press, "What's So Special About Science (And How Much Should We Spend on It?)," *Science*, **342** (6160), 817-822 (2013).
 160. D.I. Lou, J.A. Hussmann, R.M. McBee, A. Acevedo, R. Andino, W.H. Press, and S.L. Sawyer, "High-throughput DNA sequencing errors are reduced by orders of magnitude using circle sequencing," *PNAS*, **110** (49), 19872-19877 (2013).
 161. J.A. Hussmann and W.H. Press, "Local Correlations in Codon Preferences Do Not Support a Model of tRNA Recycling," *Cell Reports*, **8**, 1624-1629, September 25 (2014).
 162. J.A. Hussmann, D.I. Lou, S.L. Sawyer, and W.H. Press, "Reply to Schmitt et al.: Data-filtering schemes for avoiding double-counting in circle sequencing," *PNAS*, **111** (16), E1561 (2014).

163. J.A. Hussmann, S. Patchett, A. Johnson, S. Sawyer, W.H. Press. "Understanding biases in ribosome profiling experiments reveals signatures of translation dynamics in yeast", *PLoS Genet* 11 (12), e1005732 (2015) at <https://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1005732> .
164. A.C. Stabell, J. Hawkins, M. Li, X. Gao, M. David, W.H. Press, and S.L. Sawyer, "Non-human primate Schlafen11 inhibits production of both host and viral proteins," *PLOS Pathogens*, **12** (12): e1006066, December 27 (2016) at <https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1006066> .
165. C. Jung, J.A. Hawkins, S.K. Jones, Y. Xiao, J.R. Rybarski, K.E. Dillard, J. Hussmann, F.A. Saifuddin, C. Savran, A.D. Ellington, A. Ke, W.H. Press, and I.J. Finkelstein, "Massively Parallel Biophysical Analysis of CRISPR-Cas Complexes on Next Generation Sequencing Chips", *Cell*, **170** (1), pp. 35-47, June 29 (2017) at [https://www.cell.com/cell/fulltext/S0092-8674\(17\)30637-2](https://www.cell.com/cell/fulltext/S0092-8674(17)30637-2) .
166. J.A. Hawkins, S.K. Jones, I.J. Finkelstein, W.H. Press. "Indel-correcting DNA barcodes for high-throughput sequencing", *PNAS*, **115** (27), pp. E6217-E6226 (2018) at <https://www.pnas.org/content/115/27/E6217> .
167. W.H. Press and J.A. Hawkins, "An Indel-Resistant Error-Correcting Code for DNA-Based Information Storage," arXiv:1812.01112 [q-bio.QM], December 3 (2018) at <https://arxiv.org/abs/1812.01112> .
168. J.A. Hawkins, M.E. Kaczmarek, M.A. Müller, C. Drosten, W.H. Press, and S.L. Sawyer, "A metaanalysis of bat phylogenetics and positive selection based on genomes and transcriptomes from 18 species," *PNAS*, **116** (23), 11351-11360, June 4 (2019) at <https://www.pnas.org/content/116/23/11351> .
169. W.H. Press, "Bell, Bohm, and qubit: EPR remixed," *American Journal of Physics* **88**, 558, June 18 (2020) at <https://doi.org/10.1119/10.0001189> .
170. W.H. Press, "Obituary: Freeman J. Dyson," *Physics Today* 73, 7, 60, July 1 (2020) at <https://doi.org/10.1063/PT.3.4529> .
171. W.H. Press, J.A. Hawkins, S.K. Jones, J.M. Schaub, and I.J. Finkelstein, "HEDGES Error-Correcting Code for DNA Storage Corrects Indels and Allows Sequence Constraints," *PNAS*, **117** (31) 18489-18496, August 4 (2020) at <https://www.pnas.org/content/117/31/18489> .
172. S.K. Jones, J.A. Hawkins, N.V. Johnson, C. Jung, K. Hu, J.R. Rybarski, J.S. Chen, J.A. Doudna, W.H. Press, and I.J. Finkelstein, "Massively parallel kinetic profiling of natural and engineered CRISPR nucleases," *Nature Biotechnology*, September 7 (2020) at <https://doi.org/10.1038/s41587-020-0646-5> .
173. W.H. Press and J.A. Hawkins, "Likelihood Models for Forensic Genealogy," ArXiv 2010.02985 [q-bio.GN] (October 6, 2020) at <https://arxiv.org/abs/2010.02985> .
174. C. Cassel, S.L. Graham, and W.H. Press, "Comment: It shouldn't be so hard to get the data needed to protect public health," *Modern Healthcare*, August 31, 2020, p. 23, at <https://www.modernhealthcare.com/opinion-editorial/it-shouldnt-be-so-hard-get-data-needed-protect-public-health> .

175. W.H. Press and R.C. Levin, “Editorial: Modeling, post COVID-19,” *Science*, **370** (6520), 1015 (November 27, 2020) at <https://science.sciencemag.org/content/370/6520/1015> .
176. D. Baltimore, R. Conn, W.H. Press, T. Rosenbaum, D.N. Spergel, S.M. Tilghman, H. Varmus, “Should the Endless Frontier of Federal Science be Expanded?”, *AAAS Policy Alert Newsletter* (March, 2021) at <http://arxiv.org/abs/2103.09614> .
177. W.H. Press, “At Lunch with Freeman Dyson,” *Inference: International Review of Science*, **6** (1), May 2021, at <https://inference-review.com/article/at-lunch-with-freeman-dyson> .
178. D.N. Spergel and W.H. Press. “Innovation Is Not a Linear Race, It’s a Dance Between Discovery and Use.” *Issues in Science and Technology* (August 17, 2021), at <https://issues.org/innovation-dance-between-discovery-use-spergel-press/> .
179. W.H. Press and A.K. Finkbeiner. “Freeman J. Dyson, 1923-2020,” 19 pp., *Biographical Memoirs of the National Academy of Sciences* (2021), at <http://www.nasonline.org/publications/biographical-memoirs/memoir-pdfs/dyson-freeman.pdf> .
180. C.F. Chyba, C.K. Cassel, S.L. Graham, J.P. Holdren, E. Penhoet, W.H. Press, M. Savitz, H. Varmus. “Create a COVID-19 Commission,” *Science*, **374** (6570), 932-935 (November 19, 2021) at <https://www.science.org/doi/10.1126/science.abk0029>
181. W.H. Press, “Fast trimer statistics facilitate accurate decoding of large random DNA barcode sets even at large sequencing error rates,” *PNAS Nexus*, **1** (5) <https://doi.org/10.1093/pnasnexus/pgac252> (November, 2022)
182. W.H. Press, “Optimal Cross-Correlation Estimates from Asynchronous Tick-by-Tick Trading Data,” ArXiv 2303.16153 [q-fin] (March 18, 2023) at <https://arxiv.org/abs/2303.16153> .
183. W.H. Press, “NYSE Price Correlations Are Arbitrageable Over Hours and Predictable Over Years,” ArXiv 2305.08241 [q-fin] (May 14, 2023) at <https://arxiv.org/abs/2305.08241> .
184. W. Blau, V.G. Cerf, J. Enriquez, et al. “Protecting scientific integrity in an age of generative AI,” *PNAS*, **121** (22), e2407886121, May 21 (2024) at <https://www.pnas.org/doi/10.1073/pnas.2407886121> .
185. W.H. Press, “‘Minus-One’ Data Prediction Generates Synthetic Census Data with Good Crosstabulation Fidelity,” ArXiv 2406.05264 [stat.AP] (June 7, 2024) at <https://arxiv.org/abs/2406.05264> .
186. W.H. Press, “Population Models with Phenotypic Diversity and Fluctuating Environment Illustrate Parameter Regimes of Adaptation vs. Extinction,” bioRxiv (2025) at <https://www.biorxiv.org/content/10.1101/2025.01.01.631012v1>
187. A.K. Finkbeiner and W.H. Press, “Lewis McAdory Branscomb (1926-2023),” *Biographical Memoirs of the National Academy of Sciences* (2025), at <https://www.nasonline.org/wp-content/uploads/2025/03/Branscomb-Lewis-M.pdf>

188. W.H. Press, “LLM Architecture, Scaling Laws, and Economics: A Quick Summary,” ArXiv 2511.11572 [CS.gl] (September 11, 2025) at <https://arxiv.org/abs/2511.11572>
189. W.H. Press, “Correlated Confounding Variables Are Not Easily Controlled for in Large Survey Research,” ArXiv 2512.01003 [stat.ME] (November 30, 2025) at <https://arxiv.org/abs/2512.01003>