Some references on Bayesian statistics and related topics

Bayesian statistics: [1] [14] [10] [5] [2] [22] [3] [24] [26] [9]
Neural networks and pattern recognition: [4]
Density estimation: [25]
Inverse problems and regularization: [27] [13] [28]
Graphical models: [15] [11] [12]
Analysis of empirical spectra: [6] [7]
Relations to statistical physics [8] [16]
Inverse quantum theory [23] [20] [19] [18] [17] [21]

References

[1] T. R. Bayes. An essay towards solving a problem in the doctrine of chances. *Phil. Trans. Roy. Soc. London*, 53:370, 1763. Reprinted in *Biometrika* (1958) **45**, 293.

[2] J. O. Berger. *Statistical Decision Theory and Bayesian Analysis*. Springer–Verlag, New York, 2nd edition, 1985.

[3] J. M. Bernado and A. F. Smith. *Bayesian Theory*. Wiley, New York, 1994.

[4] C. M. Bishop. *Neural Networks for Pattern Recognition*. Oxford University Press, Oxford, 1995.

[5] G. E. P. Box and G. C. Tiao. *Bayesian Inference in Statistical Analysis*. Addison–Wesley, Reading, MA, 1973. Wiley Classics Library Edition Published 1992.

[6] G. L. Bretthorst. *Bayesian spectrum analysis and parameter estimation*, volume 48 of *Lecture Notes in Statistics*. Springer–Verlag, Berlin, 1988. Available at `http://bayes.wustl.edu/glb/book.pdf`.

[7] R. Fischer, K. M. Hanson, V. Dose, and W. von der Linden. Background estimation in experimental spectra. *Phys. Rev. E*, 61:1152, 2000.

[8] J. Honerkamp. *Statistical Physics*. Springer–Verlag, New York, 1998.

[9] E. T. Jaynes. Probability theory: The logic of science, 2000. Available at `http://bayes.wustl.edu/etj/prob.html`.

[10] H. Jeffreys. *Theory of Probability*. Oxford University Press, Oxford, 3rd edition, 1961. (First edition 1939).

[11] F. V. Jensen. *An Introduction to Bayesian Networks*. Springer–Verlag, New York, 1996.

[12] M. Jordan, editor. *Learning in Graphical Models*. MIT Press, Cambridge, MA, 1999.

[13] A. Kirsch. *An Introduction to the Mathematical Theory of Inverse Problems*. Springer–Verlag, New York, 1996.

[14] P. S. Laplace. *Theorie Analytique des Probabilités*. Courcier, Paris, 1812.

[15] S. L. Lauritzen. *Graphical Models*. Oxford University Press, Oxford, 1996.

[16] J. C. Lemm. Bayesian field theory. Technical Report MS-TP1-99-1, Univ. of Münster, 1999. arXiv:physics/9912005.

[17] J. C. Lemm. Inverse time–dependent quantum mechanics. *Phys. Lett. A*, 276(1–4):19–24, 2000. arXiv:quant-ph/0002010.

[18] J. C. Lemm and J. Uhlig. Bayesian inverse quantum theory. Technical Report MS-TP1-99-15, Univ. of Münster, 1999. arXiv:quant-ph/0006027, to appear in Few Body Physics.

[19] J. C. Lemm and J. Uhlig. Hartree–Fock approximation for inverse many-body problems. *Phys. Rev. Lett.*, 84:4517–4120, 2000. arXiv:nucl-th/9908056.

[20] J. C. Lemm, J. Uhlig, and A. Weiguny. A Bayesian approach to inverse quantum statistics. *Phys. Rev. Lett.*, 84:2068–2071, 2000. arXiv:cond-mat/9907013.

[21] J. C. Lemm, J. Uhlig, and A. Weiguny. Bayesian reconstruction of approximately periodic potentials for quantum systems at finite temperatures. *to appear in Few Body Physics*, 2000. MS-TP1-00-4, arXiv:quant-ph/0005122.

[22] T. Loredo. From Laplace to Supernova SN 1987A: Bayesian inference in astrophysics. In P. F. Fougère, editor, *Maximum-Entropy and Bayesian Methods, Dartmouth, 1989*, pages 81–142, Dordrecht, 1990. Kluwer Academic Publishers. Available at `http://bayes.wustl.edu/gregory/gregory.html`.

[23] R.Derka, V. Buzek, G.Adam, and P.L.Knight. From quantum bayesian inference to quantum tomography. *Journal of Fine Mechanics and Optics*, 11–12:341, 1996.

[24] C. P. Robert. *The Bayesian Choice*. Springer–Verlag, New York, 1994.

[25] B. W. Silverman. *Density Estimation for Statistics and Data Analysis*, volume 26 of *Monographs on Statistics and Applied Probability*. Chapman & Hall, London, 1986.

[26] D. S. Sivia. *Data Analysis: A Bayesian Tutorial*. Oxford University Press, Oxford, 1996.

[27] A. N. Tikhonov and V. Arsenin. *Solution of Ill–posed Problems*. Wiley, New York, 1977.

[28] V. N. Vapnik. *Statistical Learning Theory*. Wiley, New York, 1998.