

References for “Covering the Basic Concepts Surrounding the Weight and Strength of Evidence – Part 1”

by Danica Ommen for the Jan. 2019 CSAFE Center-Wide Webinar

- 1) Charles R. Kingston (1965); Application of Probability Theory in Criminalistics, *Journal of the American Statistical Association*, 60:309, pp. 70-80
- 2) I J Good (1950); *Probability and the Weighing of Evidence*, Griffin, London, UK
- 3) I J Good (1985); Weight of Evidence: A Brief Survey, *Bayesian Statistics*, 2, pp. 249-270
- 4) S M Willis, C G G Aitken, A Barrett, C E H Berger, A Biedermann, C Champod, T N Hicks, J LucenaMolina, L Lunt, S McDermott, L McKenna, A Nordgaard, G O’Donnell, B Rasmusson, M J Sjerps, F Taroni, G Zadora. *ENFSI Guideline for Evaluative Reporting in Forensic Science*, European Network of Forensic Science Institutes (ENFSI), Dublin, 2015.
- 5) Q Y Kwan, *Inference of Identify of Source*, Ph.D. Dissertation in Criminology, University of California, Berkeley, 1977.
- 6) T Hicks, A Biedermann, J A de Koeijer, F Taroni, C Champod, I W Evett (2015); The importance of distinguishing information from evidence/observations when formulating propositions, *Science & Justice*, 55: 6, pp. 520-525, <https://doi.org/10.1016/j.scijus.2015.06.008>
- 7) F Taroni, C Champod, P. Margot, (1998); Forerunners of Bayesianism in Early Forensic Science, *Jurimetrics*, 38:2, pp. 183-200
- 8) J B Parker (1966); A statistical treatment of identification problems, *Journal of the Forensic Science Society*, 6, pp. 33-39
- 9) I W Evett (1977); The interpretation of refractive index measurements, *Forensic Science*, 9, pp. 209-217
- 10) John Kaplan (1968); Decision Theory and the Factfinding Process, *Stanford Law Review*, 20:6, pp. 1065-1092
- 11) M O Finkelstein, W B Fairley (1970); A Bayesian Approach to Identification Evidence, *Harvard Law Review*, 83:3, pp. 489-517
- 12) D V Lindley (1977); A Problem in Forensic Science, *Biometrika*, 64, 2, pp. 207-213
- 13) A Scheult (1978); On a problem in forensic science, *Biometrika*, 65, pp. 646-648
- 14) I W Evett (1986); A Bayesian approach to the problem of interpreting glass evidence in forensic science casework, *Journal of the Forensic Science Society*, 26, pp. 3-18

- 15) G Shafer (1982); Lindley's paradox, *Journal of the American Statistical Association*, 77, pp. 325-334
- 16) W C Thompson, E L Schumann (1987); Interpretation of Statistical Evidence in Criminal Trials: The Prosecutor's Fallacy and the Defense Attorney's Fallacy, *Law and Human Behavior*, 11:3, pp. 167-187
- 17) A P Dawid (1994); The island problem: coherent use of identification evidence, Chapter 11 of *Aspects of Uncertainty: A Tribute to D. V. Lindley*, edited by P R Freeman and A F M Smith, J. Wiley and Sons, pp. 159-170
- 18) A P Dawid (2017); Forensic likelihood ratio: Statistical problems and pitfalls, *Science and Justice*, 57, pp. 73-75
- 19) R E Kass, A E Raftery (1995); Bayes Factors, *Journal of the American Statistical Association*, 90:430, pp. 773-795
- 20) Radford M Neal (2011); MCMC using Hamiltonian dynamics, Chapter 5 of the *Handbook of Markov Chain Monte Carlo*, edited by Steve Brooks, Andrew Gelman, Galin Jones, and Xiao-Li Meng, Chapman & Hall / CRC Press
- 21) Cong Han, Bradley P Carlin (2001); Markov Chain Monte Carlo Methods for Computing Bayes Factors, *Journal of the American Statistical Association*, 96:455, pp. 1122-1132, DOI: [10.1198/016214501753208780](https://doi.org/10.1198/016214501753208780)
- 22) J M Marin, P Pudlo, C P Robert, R J Ryder (2012); Approximate Bayesian Computational methods, *Statistics and Computing*, 22:6, pp. 1167-1180
- 23) James O Berger, Luis R Pericchi (1996); The Intrinsic Bayes Factor for Model Selection and Prediction, *Journal of the American Statistical Association*, 91: 433, pp. 109-122
- 24) Anthony O'Hagan (1995); Fractional Bayes Factors for Model Comparison, *Journal of the Royal Statistical Society. Series B (Methodological)*, 57: , pp. 99-138
- 25) P J Green, K Łatuszyński, M Pereyra, C P Robert (2015); Bayesian computation: a summary of the current state, and samples backwards and forwards, *Statistics and Computing*, 25:4, pp. 835-862
- 26) K P S Chan and C G G Aitken (1989); Estimation of the Bayes' Factor in a forensic science problem, *Journal of Statistical Computation and Simulation*, 33, pp. 249-264
- 27) C G G Aitken, D Lucy (2004); Evaluation of trace evidence in the form of multivariate data, *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, 53, pp. 109-122

- 28) National Research Council Committee on Identifying the Needs of the Forensic Sciences Community, *Strengthening Forensic Science in the United States: A Path Forward*, The National Academies Press, Washington, D.C., USA, 2009.
- 29) C Neumann, C P Saunders (2015); Commentary on: Alberink I, de Jongh A, Rodriguez C. Fingerprint evidence evaluation based on automated fingerprint identification system matching scores: the effect of different types of conditioning on likelihood ratios. *J Forensic Sci* 2014; 59(1):70–81; *J Forensic Sci*, 60: 252-256. doi:[10.1111/1556-4029.12634](https://doi.org/10.1111/1556-4029.12634)
- 30) President's Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, Executive Office of the President of the United States, Washington, D.C., USA, Sept. 2016.

