

## References

- [1] D. Stocker, J. C. Kummer, “Proof of Origin and Ownership of Watermarking”, *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 142-145, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [2] E. Gomez, P. Cano, L. de C. T. Gomes, E. Batlle, M. Bonnet, “Mixed Watermarking-Fingerprinting approach for Integrity Verification of Audio Recordings”, *International Telecommunications Symposium- ITS2002*, Natal, Brazil, 2002.  
[www.iaa.upf.es/mtg/publications/its2002-egomez.pdf](http://www.iaa.upf.es/mtg/publications/its2002-egomez.pdf)
- [3] C. Grigoras, “Digital Audio Recording Analysis: The Electric Network Frequency (ENF) Criterion”, *The International Journal of Speech Language and the Law*, vol. 12, no. 1, pp. 63-76, 2005.
- [4] A. J. Cooper, “The Significance of The Serial Copying Management System (SCMS) in the Forensic Analysis of Digital Audio Recordings”, *The International Journal of Speech Language and the Law*, vol. 12, no. 1, pp. 49-62, 2005.
- [5] Postnote, *Science in Court*, Parliamentary Office of Science and Technology, no. 248, October 2005. [www.parliament.uk/documents/upload/postpn248.pdf](http://www.parliament.uk/documents/upload/postpn248.pdf)
- [6] *Scientific Evidence*, The Crown Prosecution Service, February 2005.  
[http://www.cps.gov.uk/legal/section13/chapter\\_f.html](http://www.cps.gov.uk/legal/section13/chapter_f.html)
- [7] T. Owen, J. Owen, J. Lindsay, M. McDermott, “Law and the Expert Witness-The Admissibility of Recorded Evidence”, *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 122-128, July 7<sup>th</sup>-9<sup>th</sup>, 2005.
- [8] J. J. Bubbers, “Magnetic Recording”, *Journal of the Audio Engineering Society*, vol. 46, no. 1/2, pp. 32-36, January/February 1998.
- [9] B. Pike and K. Talbot, “Wandering in Magnetic Fields”, *Studio sound*, pp. 61-67, December 1998.
- [10] BS1568: Part 2, “*Specifications for magnetic tape recording equipment, Part 2*”

## References

- Cassette for commercial tape records and domestic use, dimensions and characteristics*", British Standards Institute, 1973.
- [11] R. Berkovitz, K. Gundry, "Dolby B-Type Noise reduction System", *Audio*, September (part 1) & October (part 2) 1973, (Dolby Laboratories reprint).
- [12] R. Dolby, "A 20dB Audio Noise Reduction System for Consumer Applications", *Journal of the Audio Engineering Society*, vol. 31, no. 3, pp. 98-113, March 1983.
- [13] S. P. Lipshitz, "Dawn of the Digital Age", *Journal of the Audio Engineering Society*, vol. 46, no. 1/2, pp. 37-42, January/February 1998.
- [14] L. Baert, L. Theunissen, G. Vergult, J. Maes, J. Arts, *Digital Audio and Compact Disc Technology*, 3<sup>rd</sup> Edition, Focal Press, 1995.
- [15] R. Schiller, *Working with DAT*, Sony Broadcast and Communication, 1991.
- [16] J. Watkinson, *Compression in Video and Audio (Music Technology)*, Focal Press, 1995.
- [17] J. Maes, *The MiniDisc*, Focal Press, 1998.
- [18] G. C. P. Lokhoff, "The Digital Compact Cassette", *Audio Engineering Society, Collected Papers on Digital Audio Bit Rate Reduction*, Editors: N. Gilchrist, C. Grewin, pp. 182-189, 1996.
- [19] K. Brandenburg, "Introduction to Perceptual Coding", *Audio Engineering Society, Collected Papers on Digital Audio Bit Rate Reduction*, Editors: N. Gilchrist, C. Grewin, pp. 23-30, 1996.
- [20] B. Fox, "DCC: R.I.P Part 2", *Hi-Fi News and Record Review*, pp. 68-71, April 1997.
- [21] MZ-NH1, *Portable Minidisc Recorder Operating Instructions*, Sony Corp, 2004.
- [22] B. Grant, "DSD and the Super CD", *Audio Media*, pp. 120-123, June 1998.
- [23] J. Taylor, *DVD Demystified*, 2<sup>nd</sup> Edition, McGraw-Hill, 2001.
- [24] "Police Wireless Development", *Times Newspaper*, 28<sup>th</sup> April 1936.
- [25] M. J. Flockhart, Private communication, 4<sup>th</sup> May 1999.
- [26] D. J. Dean, "A Home Office Tape Laboratory Service", Internal Home Office report, 15<sup>th</sup> September 1982.
- [27] B. E. Koenig, "Enhancement of Forensic Audio Recordings", *Journal of the Audio Engineering Society*, vol. 36, no. 11, pp. 884-894, November 1988.
- [28] G. Reid, C. Hicks, D. Betts, A. French, "The Role of Adaptive Filtering in Audio

## References

- Surveillance”, *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 9-17, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [29] C. M. Musialik, U. Hatje, “Frequency-Domain Processors for Efficient Removal of Noise and Unwanted Audio Events ”, *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 65-77, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [30] B. E. Koenig, S. M. Hoffman, H. Nakasone, S. D. Beck “Signal Convolution of Recorded Free-Field Gunshot Sounds”, *Journal of the Audio Engineering Society*, vol. 46, no. 7/8, pp. 634-653, July/Aug 1998.
- [31] J. C. Freytag, B. M. Brustad, “A Survey of Forensic Gunshot Investigations”, *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 131-134, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [32] R. H. Bolt, F. S. Cooper, J. L. Flanagan, J. G. McKnight, T. G. Stockam, and M. R. Weiss “Report on a technical investigation conducted for the U.S District Court for the District of Columbia by the U.S Advisory Panel on White House Tapes”, *U.S Government Printing Office*, Washington, D.C. 1974.
- [33] K. W. Olsen, *Watergate: The Presidential Scandal That Shook America* , University Press of Kansas, 2003.
- [34] B. E. Koenig, “Authentication of Forensic Audio Recordings”, *Journal of the Audio Engineering Society*, vol. 38, no. 1/2, pp. 3-33, January/February 1990.
- [35] H. Hollien, *The Acoustics Of Crime*, Plenum Press, New York, 1990.
- [36] T. Owen, “Forensic Audio and Video- Theory and Applications”, *Journal of the Audio Engineering Society*, vol. 36, no. 1/2, pp. 34-41, January/February 1988.
- [37] W. Warriner, “A Guide To Tape Splicing: How to Falsify Evidence and Other Diversions”, *High Fidelity Magazine*, pp. 48-53, August 1975.
- [38] J. P. French, Private communication relating to: Regina-v-Peterson, Dorchester Crown Court, May 1998.
- [39] J. P. French, Private communication relating to: Regina-v-Hastings, Rochester Crown Court, February 1996.
- [40] AES27:1996, *Recommended Practice for Forensic Purposes – Managing Recorded Audio Materials Intended for Examination*, Audio Engineering Society, 1996.  
<http://aes.org/publications/standards>
- [41] AES43:2000, *Standard for Forensic Purposes – Criteria for the Authentication of Analog Audio Tape recordings*, Audio Engineering Society, 2000.  
<http://aes.org/publications/standards>

## References

- [42] B. Klepper, "The authentication of tape recordings: Further Considerations", *Police Applications of Speech and Tape Recording Analysis, Proceedings of the Institute of Acoustics*, vol. 6 part 1, pp. 41-47, 1984.
- [43] H. D. Ford, "The Legal aspects of Magnetic Tape Recording", *Journal of the Audio Engineering Society*, vol. 22, no. 4, pp. 226-233, April 1974.
- [44] Archbold, *Criminal Pleading and Practice*, Sweet and Maxwell LTD, 4-290, p. 434, 2003.
- [45] A. J. Cooper, *Continuous Time Domain Level Plots as an Aid to Forensic Audio Tape Analysis*, Internal Training Document, Metropolitan Police Service, Department of Information, Operations Technical Support Unit, Audio Laboratory, TTS-REP-8006 issue 1, 1999.
- [46] H. Ford, "The Noise Jungle", *Studio Sound*, pp. 26-30, August 1977.
- [47] D. J. Dean, *The relevance of replay transients in the forensic examination of analogue tape recordings*, Police Scientific Development Branch, Home Office, Science and Technology Group, publication 16/91.
- [48] B. E. Keonig and B. A. Kohus, "Measurement of recorder speed changes in Authenticity examinations", *Crime Laboratory Digest*, vol. 14, no. 4, pp. 139-152, October 1987.
- [49] J. G. McKnight, M. R. Weiss, "Flutter Analysis for Identifying Tape Recorders", *Journal of the Audio Engineering Society*, Vol. 24 Number 9, pp. 728-734, November 1976.
- [50] D. R. Begault, B. M. Brustad, A. M. Stanley, "Tape Analysis and Authentication Using Multi-Track Recorders", *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 115-121, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [51] D. J. Dean, *The Use of Ferrofluids in the Forensic Examination of Magnetic recordings*, Scientific Research and Development Branch, Publication 15/89, Crown Copyright 1989.
- [52] R. M. Grechishkin, M. Yu. Goosev, S. E. Ilyashenko, N. S Neustroev, "High Resolution Sensitive Magneto-Optic Ferrite-Garnet Films with Planar Anisotropy", *Journal of Magnetism and Magnetic Materials*, no. 157/158, pp. 305-306, 1996.
- [53] D. Boss, S. Gfroerer, N. Neoustroev, "A New Tool for the Visualisation of Magnetic Features on Audiotapes", *The International Journal of Speech Language and the Law, Forensic Linguistics*, vol. 10, no. 2, pp. 255-276, 2003.
- [54] J. P. French, "Developments in Forensic speaker Identification", *Institute of Acoustics, Acoustics Bulletin*, vol. 18, no. 5, pp. 13-16, September-October 1993.
- [55] A. J. Presty, *A New Approach to Sound Spectrography*, Voiceprint Laboratories Corporation, Somerville New Jersey.

## References

- [56] CSL Computerised Speech Lab, Kay Elemetrics Corp.  
[www.kayelemetrics.com](http://www.kayelemetrics.com) April 2005.
- [57] R. K. Potter, G. A. Kopp and H. Green Kopp, *Visible Speech*, Dover publications Inc, New York, Dover Edition 1966. (Corrected republication of the work first published by D. Van Nostrand Company Inc 1947).
- [58] L. G. Kersta, "Voice Identification", *Nature*, no. 196, pp. 1253-1257, 1962.
- [59] R. H. Bolt, F. S. Cooper, E. E. David Jr, P. B. Denes, J. M. Pickett and K. N. Stevens, "Speaker Identification by speech spectrograms: A Scientists View of its Reliability for Legal Purposes", *The Journal of the Acoustical Society of America*, vol. 47, no. 2 (part 2), pp. 597-612, February 1970.
- [60] O. Tosi, H. Oyer, W. Lashbrook, C. Pedrey, J. Nicol, E. Nash, "Experiment on Voice Identification", *The Journal of the Acoustical Society of America*, vol. 51, no. 6 (part2), pp. 2030-2043, June 1972.
- [61] D. C. Chapman, *Visit to the USA in connection with Voice Identification*, Metropolitan Police Telecommunications, Internal report, 1974.
- [62] M. C. Dermott and T. Owen, *Voice Identification, The Aural/Spectrographic method*.  
[http://www.owlinvestigations.com/forensic\\_articles/aural\\_spectrographic/fulltext.html](http://www.owlinvestigations.com/forensic_articles/aural_spectrographic/fulltext.html)  
April 2005.
- [63] B. E. Koenig, "Spectrographic Voice Identification: A forensic survey", *The Journal of the Acoustical Society of America*, vol. 76, no. 6 (part2), pp. 2088-2090, June 1986.
- [64] B. E. Koenig, "Spectrographic Voice Identification", *Crime Laboratory Digest*, vol. 13, no. 4, pp. 105-118, October 1986.
- [65] A. Braun and H. J. Kunzel, "Is forensic speaker identification unethical or can it be unethical not to do it", *Forensic Linguistics, The Journal of Speech Language and the Law*, vol. 5, no. 7, 1998.
- [66] Regina v Robb, Southwark Crown Court London, Transcription of stenography notes of V. Wason Associates, relating to the evidence of J. Baldwin. 21<sup>st</sup> November 1989 to 30<sup>th</sup> November 1989.
- [67] F. Nolan, *The Phonetic Basis of Speaker Recognition*, Cambridge University Press, 1983.
- [68] J. Baldwin and J. P. French, *Forensic Phonetics*, Pinter, 1990.
- [69] J. P. French, "An Overview of Forensic Phonetics with Particular Reference to Speaker Identification", *Forensic Linguistics, The Journal of Speech Language and the Law*, vol. 1, no. 2, pp. 169-181, 1994.

## References

- [70] F. Poza, D. R. Begault, "Voice Identification and Elimination Using Aural-Spectrographic Protocols", *Audio Engineering Society, Proceedings of the 26<sup>th</sup> International Conference, Audio Forensics in the Digital Age*, Denver, USA, pp. 21-28, July 7<sup>th</sup>-9<sup>th</sup> 2005.
- [71] J. R. Hassall, K. Zaveri, *Acoustics and Noise Control*, Bruel and Kjaer, 4<sup>th</sup> Edition, ch. 2, pp. 13-39, 1979.
- [72] A. P. A. Broeders, "Forensic Speech and Audio Analysis Forensic Linguistics: 1998 to 2001 A Review", *13<sup>th</sup> Interpol Forensic Science Symposium*, Lyon, France, October 16-19, 2001.
- [73] C. Rowden, (Editor), *Speech Processing*, McGraw Hill, ch. 1, pp. 1-22, 1991.
- [74] Regina-v-Sian & Sian , Central Criminal Court, London, December 1998.
- [75] C. W. Sanchez, "An Understanding and Implementation of the SCMS for Digital Audio Transmission", *Journal of the Audio Engineering Society*, vol. 42 no. 3, pp. 162-188, March 1994.
- [76] IEC-60958-3:1999, *Digital audio interface – Part 3: Consumer applications*, International Electrotechnical Commission, Geneva, December 1999.
- [77] A. V. Oppenheim, A. S. Willsky, S. H. Nawab, *Signals and Systems*, Prentice hall, 2<sup>nd</sup> edition, 1996.
- [78] J. Watkinson, *The Art of Digital Audio*, focal Press, 3<sup>rd</sup> edition, 2001.
- [79] B. A. Blesser, "Digitisation of Audio: A Comprehensive Examination of Theory, Implementation, and Current Practice", *Journal of the Audio Engineering Society*, vol. 26, no. 10, pp. 739-771, October 1978.
- [80] S. Harris, "The Effects of Sampling Clock Jitter on Nyquist Sampling Analogue to Digital Converters and on Oversampling Delta-Sigma ADC's", *Journal of the Audio Engineering Society*, vol. 38, no. 7/8, pp. 537-542, July/August 1990.
- [81] P. Kraniuskas, *Transforms in Signals and Systems*, Adison Wesley Publishing, ch. 1, pp. 1-41, 1992.
- [82] B. Blesser, "Advanced Analog to Digital Conversion and Filtering: Data Conversion", *Audio Engineering Society, Collected Papers from the Premiere Conference, Digital Audio*, New York, pp. 37-53, 3<sup>rd</sup>-6<sup>th</sup> June, 1982.
- [83] D. Bellan, A. Brandolini, A. Gandelli, "Quantization Theory – A Deterministic Approach", *IEEE Transactions on Instrumentation and Measurement*, vol. 48, no. 1, pp. 18-25, February 1999.
- [84] B. Widrow, I. Kollar, Ming-Chang Liu, "Statistical Theory of Quantization", *IEEE Transactions on Instrumentation and Measurement*, vol. 45, no. 2, pp. 353-361, April 1996.

## References

- [85] B. Widrow, "Statistical Analysis of Amplitude Quantized Sampled-Data Systems", *Transactions of American Institute of Electrical Engineers pt II Applications and Industry*, vol. 79, pp. 555-568, January 1961.
- [86] I. Kollar, "Statistical Theory of Quantization: Results and Limits", *Periodica Polytechnica Ser, Electrical Engineering*, vol. 28, no. 2 & 3, pp. 173-189, 1984.
- [87] R. M. Gray, "Quantization Noise Spectra", *IEEE Transactions on Information Theory*, vol. 36, no. 6, pp. 1220-1244, November 1990.
- [88] A. B. Sripad, D. L. Snyder, "A Necessary and Sufficient Condition for Quantization errors to be Uniform and white", *IEEE Transactions on Acoustics, Speech and Signal Processing*, vol. ASSP-25, no. 5, pp. 442-448, October 1997.
- [89] R. C. Maher, "On the Nature of Granulation Noise in Uniform Quantization Systems", *Journal of the Audio Engineering Society*, vol. 40, no. 1/2, January/February 1992.
- [90] M. O. Hawksford, "An Introduction to Digital Audio", *Audio Engineering Society, proceedings of the 10<sup>th</sup> International Conference, Images of Audio*, pp. T3-T42, London, September 1991.
- [91] S. P. Lipshitz, R. A. Wannamaker, J. Vanderkooy, "Quantization and Dither: A Theoretical Survey", *Journal of the Audio Engineering Society*, vol. 40, no. 5, pp. 355-375, May 1992.
- [92] J. R. Stuart, *Coding High Quality Digital Audio*, Presented to the Japan Audio Society On Multi-Channel Coding and Recording Methods, June 1989. <http://www.meridian-audio.com/ara/jas98.htm>
- [93] J. Vanderkooy, S. P. Lipshitz, "Dither in Digital Audio", *Journal of the Audio Engineering Society*, vol. 35, no. 12, pp. 966-975, December 1987.
- [94] R. M. Gray, "Dithered Quantizers", *IEEE Transactions on Information Theory*, vol. 39, no. 3, pp. 805-812, May 1993.
- [95] J. Vanderkooy, S. P. Lipshitz, "Digital Dither: Signal Processing with Resolution Far Below the Least Significant Bit", *Audio Engineering Society, Proceedings of the 7<sup>th</sup> International Conference, Audio in Digital Times*, Toronto, Canada, pp. 87-96, May 14<sup>th</sup>-17<sup>th</sup> 1989.
- [96] I. A. Glover, P. M. Grant, *Digital Communications*, Prentice Hall, ch. 11, pp. 387-388, 1998.
- [97] M. W. Hauser, "Principles of Oversampling A to D Conversion", *Journal of the Audio Engineering Society*, vol. 39, no. 1/2, pp. 3-26, January/February 1991.

## References

- [98] M. Bertocco, C. Narduzzi, P. Paglierani, D. Petri, “A Noise Model for Digitized Data”, *IEEE Transactions of Instrumentation and Measurement*, vol. 49, no. 1, February 2000.
- [99] L. J. Giacoletto, (Editor), *Electronics Designers Handbook*, McGraw Hill, 2<sup>nd</sup> Edition, 1977.
- [100] N. S. Jayant, P. Noll, *Digital Coding of Waveforms Principle Applications to Speech and Video*, Prentice Hall Inc, ch. 4, pp. 163-164, 1984.
- [101] M. O. Hawksford, “Techniques in Digital to Analogue Conversion”, *Audio Engineering Society UK Conference, Managing the Bit Budget*, pp. 41-67, 16/17 May 1994.
- [102] R. B. Randall, “Application of B & K Equipment to Frequency Analysis”, *Bruel and Kjaer*, 2<sup>nd</sup> edition, ch. 2.4, September 1997.
- [103] A. Papoulis, S. U. Pillai, *Probability, Random Variables and Stochastic Processes*, McGraw Hill, 4<sup>th</sup> edition, 2002.
- [104] D. Smith, P. H. Whittman, “Design Considerations of Low Noise Audio Input Circuitry for a Professional Microphone mixer”, *Audio Engineering Society, Proceedings of the 36<sup>th</sup> Convention*, April 28-May 1<sup>st</sup> 1969, pre-print 644.
- [105] T. F. Darling, “Mathematical Noise Modelling and Analysis of Some Popular Preamplifier Circuit Topologies”, *Journal of the Audio Engineering Society*, vol. 35, no. 1/2, pp. 15-23, January/February 1987.
- [106] P. B. Denes, E. N. Pinson, *The Speech Chain: The Physics and Biology of Spoken Language*, Anchor Press, Anchor Science Study Series, ch. 7, pp. 152-153, 1973.
- [107] H. K. Dunn, S.D. White, “Statistical Measurements on Conversational Speech”, *Journal of the Acoustical Society of America*, vol. 11, pp. 278-288, January 1940.
- [108] EA Series Standard Electret Microphone Data Sheet, S-544-0989, Knowles Electronics Inc, Illinois, USA.
- [109] A. Lawrence, *Acoustics and the Built Environment*, Elsevier Applied Science, ch. 1, p. 22, 1989.
- [110] C. S. Elsdon, A. J. Ley, “A Digital Transfer Function Analyser based on pulse rate techniques”, *Automatica*, vol. 5, pp. 51-60, 1969.
- [111] L. Ljung, “On the Estimation of Transfer Functions”, *Automatica*, vol. 21, no. 6, pp. 677-696, 1985.
- [112] K. J. Astrom, P. Eykhoff, “System Identification – A Survey”, *Automatica*, vol. 7, pp. 123-167, 1971.

## References

- [113] P. E. Wellstead, “Non-Parametric Methods of System Identification”, *Automatica*, vol. 17, pp. 55-69, 1981.
- [114] J. Schoukens and J. Renneboog, “Modeling the Noise Influence on the Fourier Coefficients After a Discrete Fourier Transform”, *IEEE Transactions on Instrumentation and Measurement*, vol. IM-35, no. 3, pp. 278-286, September 1986.
- [115] J. Antoni, P. Wagstaff, J. Henrio, “  $H_\alpha$  -A Consistent Estimator for Frequency Response Functions with Input and Output Noise”, *IEEE Transactions on Instrumentation and Measurement*, vol. 53, no. 2, pp. 457-465, April 2004.
- [116] J. Schoukens, R. Pintelon, “Measurement of Frequency Response Functions in Noisy Environments”, *IEEE Transactions on Instrumentation and Measurement*, vol. 39, no. 6, pp. 905-909, December 1990.
- [117] X. Rong Li, *Probability, Random Signals and Statistics*, CRC Press, 1999.
- [118] C. Chatfield, *The Analysis of Time Series*, Chapman & Hall/CRC, 5<sup>th</sup> edition, 1999.
- [119] S. D. Stearns, R. A. David, *Signal Processing Algorithms in Matlab*, Prentice Hall, 1996.
- [120] J. Kaiser and R. Hamming, “Sharpening the Response of a Symmetric Nonrecursive Filter by Multiple Use of the Same Filter”, *IEEE Transactions Acoustics Speech and Signal Processing*, vol. ASSP-25, no. 5, pp. 415-422, 1977.
- [121] R. Legadec, D. Weiss, R. Greutmann, W. Studer, “High Quality Analog Filters for Digital Audio”, *Audio Engineering Society, 67<sup>th</sup> Convention*, New York, October 31/November 3, 1980, pre-print 1707(B-4)
- [122] P. Stoica, R. L. Moses, *Introduction to Spectral Analysis*, Prentice Hall Inc, 1997.
- [123] S. L. Marple Jr , *Digital Spectral Analysis with Applications*, Prentice Hall Inc, 1987.
- [124] S. M. Kay , *Modern Spectral Estimation: Theory and Applications*, Prentice Hall Inc, 1988.
- [125] M. H. Hayes, *Statistical Digital Signal Processing and Modeling*, Wiley, ch. 3, pp. 82-84, 1996.
- [126] S. M. Kay, S. L. Marple JR, “Spectrum Analysis – A Modern Perspective”, *Proceedings of the IEEE*, vol. 69, no. 11, pp. 1380-1419, November 1981.
- [127] P. D. Welch, “The Use of Fast Fourier Transform for the Estimation of Power Spectra: A Method Based on Time Averaging Over Short, Modified Periodograms”, *IEEE Transactions on Audio and Acoustics*, vol. AU-15, no. 2, pp.70-73, June 1967.
- [128] P. D. Welch, “On the Variance of Time and Frequency Averages over Modified

## References

- Periodograms”, *IEEE International Conference, Acoustics Speech and Signal Processing*, (Hartford, CT), pp. 58-62, May 9-11, 1997.
- [129] M. S. Bartlett, “Smoothing Periodograms from Time-Series with Continuous Spectra”, *Nature*, no. 4096, pp. 686-687, May 1, 1948.
- [130] B. Mulgrew, P. Grant, J. Thompson, *Digital Signal Processing Concepts and Applications*, Macmillan Press, 1999.
- [131] L. R. Rabiner, R. W. Schafer and C. M. Rader, “The Chirp z-Transform and Its Applications”, *Bell Systems Technical Journal*, pp. 1249-1293, May 1969.
- [132] L. R. Rabiner, R. W. Schafer and C. M. Rader, “The Chirp z-Transform algorithm”, *IEEE Transactions On Audio and Electroacoustics*, vol. AU-17, no. 2, pp. 86-92, June 1969. (condensed version of [1])
- [133] A. V. Oppenheim, R. W. Schafer, *Discrete Time Signal Processing*, Prentice Hall, 1989.
- [134] F. J. Harris, “On the Use of Windows for Harmonic Analysis with the Discrete Fourier Transform”, *Proceedings of the IEEE*, vol. 66, no. 1, pp. 51-83, January 1978.
- [135] G. E. Carlson, *Signal and Linear Signal Analysis*, Wiley, 2<sup>nd</sup> edition, 1998.
- [136] J. Neter, M. H. Kutner, C. J. Nachtsheim, W. Wasserman, *Applied Linear Statistical Models*, 4<sup>th</sup> edition, WCB/McGraw-Hill, 1996.
- [137] MATLAB, *Signal Processing Toolbox Users Guide*, version 5, The Math Works, ch. 7, pp. 152-154, 2000.
- [138] H. V. Sorensen, S. Burrus, “Efficient Computation of the DFT with Only a Subset of Input or Output Points”, *IEEE Transactions on Signal Processing*, vol. 41, no. 3, pp. 1184-1200, March 1993.
- [139] G. E. P. Box, D. R. Cox, “An Analysis of Transformations”, *Journal of the Royal Statistical Society*, B26, pp. 211-43, 1964.
- [140] R. W. Hamming, *Digital Filters*, Prentice Hall, ch. 11, pp. 189-193, 1973.
- [141] K. A. Stroud, *Engineering Mathematics*, Macmillan Press Ltd, 4<sup>th</sup> Edition, ch. 14, p. 588, 1995.
- [142] S. O. Rice, “Mathematical Analysis of Random Noise”, *Bell Systems Technical Journal*, vol. 23, pp. 282-332, July 1944 (parts I and II).
- [143] S. O. Rice, “Mathematical Analysis of Random Noise”, *Bell Systems Technical Journal*, vol. 24, pp. 46-156, July 1945 (part III).

## References

- [144] G. R. Cooper, C. D. McGillem, *Probabilistic Methods of Signal and System Analysis*, Oxford University Press, 3rd Edition, 1999.
- [145] G. Cowan, *Statistical Data Analysis*, Clarendon Press, ch. 2, p. 35, 1998.
- [146] X. Gourdon, P. Sebah, *The Euler Constant, Numbers Constants and Computation*, August 31<sup>st</sup>, 2001. <http://numbers.computation.free.fr/Constants/constants.html>
- [147] R. R. Hocking, "Developments in Linear Regression Methodology: 1959-1982", *Technometrics*, vol. 25, no. 3, pp. 219-230, August 1983.
- [148] F. A. Graybill, H. K. Iyer, *Regression Analysis Concepts and Applications*, Duxbury Press, 1994.
- [149] D. C. Montgomery, G. C. Runger, *Applied Statistics and Probability for Engineers*, Wiley, 2<sup>nd</sup> edition, 1999.
- [150] D. G. Klienbaum, L. L. Kupper, K. E. Muller, A. Nizam, *Applied Regression Analysis and other Multivariable Methods*, Duxbury Press, 3<sup>rd</sup> edition, 1998.
- [151] A. H. Nuttall, "Some Windows with Very Good Sidelobe Behaviour", *IEEE Transactions on Acoustics, Speech and Signal Processing*, Vol. ASSP-29, no. 1, pp. 84-91, February 1981.
- [152] C. Bingham, M. D. Godfrey, J. W. Tukey, "Modern Techniques of Power Spectrum Estimation", *IEEE Transactions on Audio and Electroacoustics*, vol. AU-15, no. 2, pp. 56-66, June 1967.
- [153] U. Gather, "Robust Estimation of the Mean of the Exponential Distribution in Outlier Situations", *Communication in Statistics: Theory and Methods*, vol. 15, no. 8, pp. 2323-2345, 1986.
- [154] R. Serfling, "Efficient and Robust Fitting of Lognormal Distributions", *North American Actuarial Journal*, no. 6, pp. 95-109, 2002.
- [155] V. Brazauskas, R. Serfling, "Small Sample Performance of Robust Estimators of Tail Parameters for Pareto and Exponential Models", *Journal of Statistical Computation and Simulation*, no. 70, pp. 1-19, 2001.
- [156] D. R. Bickel, "Robust Estimators of the Mode and Skewness of Continuous Data", *Computational Statistics and Data Analysis*, no. 39, pp. 153-163, 2001.
- [157] V. Brazauskas, R. Serfling, "Robust and Efficient Estimation of the Tail Index of a One-Parameter Pareto Distribution", *North American Actuarial Journal*, no. 4, pp. 12-27, 2000.
- [158] D. R. Bickel. "Robust and Efficient Estimation of the Mode of Continuous Data: The Mode as a Viable Measure of Central Tendency", *Journal of Statistical Computation*

## References

- Simulation*, vol. 73, no. 12, pp. 899-912, December 2003.
- [159] X. Li, W. Fang, Q. Tian, "Error Criteria Analysis and Robust Data Fusion", *IEEE International Conference on Acoustics Speech and Signal Processing (ICASP 94)*, 94CH3378-8, pp. IV-37-40, Adelaide Australia, April 19-22, 1994.
- [160] R. B. Stretts, "Arbitrary Non-Mean Square Error Criteria", *IEEE Transaction on Automatic Control*, pp. 376-377, October 1963.
- [161] T. R. Willemain, A. Allahverdi, P. DeSautels, J. Eldredge, O. Gur, M. Miller, G. Panos, A. Srinivasan, J. Surtihadi, E. Topal, "Robust Estimation Methods for Exponential Data: A Monte-Carlo Comparison", *Communication in Statistics: Simulation*, vol. 21, no. 4, pp. 1043-1075, 1992.
- [162] R. Pintelon, J. Schoukens, J. Renneboog, "The Geometric Mean of Power (Amplitude) Spectra has a Much Smaller Bias than the Classical Arithmetic (RMS) Averaging", *IEEE Transactions on Instrumentation and Measurement*, vol. 37, no. 2, pp. 213-218, June 1988.
- [163] F. Attivissimo, M. Savino, A. Trotta, "A Study of Nonlinear Averaging to Perform Power Spectral Density Estimation Algorithms", *IEEE Transactions on Instrumentation and Measurement*, vol. 49, no. 5, pp. 1036-1042, October 2000.
- [164] F. Attivissimo, M. Savino, A. Trotta, "Power Spectral Density Estimation Via Overlapping Nonlinear Averaging", *IEEE Transactions on Instrumentation and Measurement*, vol. 50, no. 5, pp. 1418-1424, October 2001.
- [165] E. W. Weisstein, *Arithmetic-Logarithmic-Geometric Mean Inequality*, Wolfram Research Inc, <http://mathworld.wolfram.com/Arithmetic-Logarithmic-GeometricMeanInequality.html>.
- [166] G. Brys, M. Hubert, A. Struyf, "A Robustification of the Jarque-Bera Test of Normality", *International Association of Statistical Computing, 16<sup>th</sup> Symposium*, Prague, Czech Republic, 23-27<sup>th</sup> Aug 2004.  
[www.wis.kuleuven.ac/be/stat/papers/tailweightCOMSTAT04.pdf](http://www.wis.kuleuven.ac/be/stat/papers/tailweightCOMSTAT04.pdf)
- [167] IEC-60958-3:1999, *Digital audio interface – Part 3: Consumer applications*, International Electrotechnical Commission, Geneva, December 1999.
- [168] AES5:1998, *Recommended Practice for Professional Digital Audio – Preferred Sampling Frequencies for Applications Employing Pulse-Code Modulation*, Audio Engineering Society, 1998. <http://aes.org/publications/standards>
- [169] J. Dunn, "Anti-Alias and Anti-Image filtering: The Benefits of 96kHz Sampling Rate Formats for Those Who Cannot Hear Above 18kHz", *Audio Engineering Society 104<sup>th</sup> Convention*, Amsterdam, May 1998, Preprint No 4734.

## References

- [170] F. J. Anscombe, J. W. Tukey, "The Examination and Analysis of Residuals", *Technometrics*, vol. 5, no. 2, pp. 141-160, May 1963.
- [171] J. Durbin, G.S. Watson, "Testing for Serial Correlation in Least Squares Regression", *Biometrika*, no. 37, pp. 409-428, 1951.
- [172] MATLAB, *Statistics Toolbox Users Guide*, The Mathworks Inc, version 3, ch. 1, pp. 128-129, 2001.
- [173] A. B. J. Knee, M. O. J. Hawksford, "Evaluation of Digital Systems and Digital recording Using Real Time Audio Data", *Audio Engineering Society 98<sup>th</sup> Convention*, Paris, France, February 25-28, 1995, Preprint No 4003.
- [174] J. M. Weida, "Classification and Comparison of Real vs Test Audio Signals", *Audio Engineering Society 112<sup>th</sup> Convention*, Munich, Germany, May 10-13, 2002, Preprint No 5509.
- [175] J. Watkinson, "The M-PEG Handbook, MPEG-1, MPEG-2, MPEG-4", Focal Press, 2001.
- [176] K. Tsutsui, H. Susuki, O. Shimoyoshi, M. Sonohara, K. Akagiri, R. M. Heddle, "ATRAC: Adaptive Transform Acoustic Coding for MiniDisc", *Audio Engineering Society, Collected Papers on Digital Audio Bit Rate Reduction*, Editors: N. Gilchrist, C. Grewin, pp. 95-101, 1996.
- [177] F. Wylie, "Digital Audio Compression-Tandem Coding", *Audio Engineering Society, Collected Papers on Digital Audio Bit Rate Reduction*, Editors: N. Gilchrist, C. Grewin, pp. 141-142, 1996.
- [178] R. K. Block, *The Data Analysis Briefbook*, <http://rkb.home.cern.ch/rkb/titleA.html>, April 1998.
- [179] E. W. Weisstein, *Gamma Function*, Wolfram Research Inc, <http://mathworld.wolfram.com/GammaFunction.html> April 2005