

# James V. White

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**Citizenship** USA

## Education

**BS** in Electrical Engineering, Northwestern University (1960-64)

**SM** in Applied Physics, Harvard University, Graduate School of Arts and Sciences (1964-65)

**PhD** in Engineering, Harvard University, Graduate School of Arts and Sciences (1965-70)

**Teaching Fellowship** Harvard University (1965)

**Post-Doctoral Research Fellowship** Harvard University (1970)

## Research Collaborations

### 2000 – 2003, Harvard Medical School

Professor Frederick P. Roth, Director of the Roth Lab (<http://llama.med.harvard.edu>), Department of Biological Chemistry and Molecular Pharmacology.

### 1988 – 2003, Boston University

Professor Temple Smith, Director of BioMolecular Engineering Research Center (<http://bmerc-www.bu.edu>), Biomedical Engineering Department, College of Engineering.

### 1996 – 1999, Massachusetts Institute of Technology

Professor Roy Welsch, Center for Computational Research in Economics and Management Science (<http://mitsloan.mit.edu/research/centers.html>), Sloan School of Management.

## Employment

### 2009–present, Algorithmic Solutions, Dorchester MA (<http://JVWhite.Com>).

*Consultant.* Develops unique algorithmic solutions for extracting information from large complex data sets. Currently modeling WMAP Cosmic-Microwave-Background data using state-space techniques.

### 2004–2009, BAE SYSTEMS, Burlington, MA (<http://baesystems.com>).

*Principal Engineer.* Develops new technologies for extracting information about relations and processes in large complex data sets.

### 2003–2004, ALPHATECH, Inc., Burlington, MA (<http://alphatech.com>).

*Principal Engineer,* Information Fusion Directorate. Develops new technologies for extracting information about relations and processes in large complex data sets.

### 1998–2003, JVWhite.Com, Cambridge MA (<http://JVWhite.Com>).

*Consultant.* Develops unique algorithmic solutions for modeling and extracting information from large complex data sets. Extensive experience in multivariate data analysis and visualization, stochastic modeling, model-based clustering, classification, estimation, and prediction algorithms. Application areas include computational biology and informatics, finance, geodesy, oceanography, x-ray tomography, meteorology, seismology, and acoustics.

**1997 – present, Boston University, Boston MA.**

*Adjunct Professor*, BioMolecular Engineering Research Center (<http://bmerc-www.bu.edu>), Biomedical Engineering Department, College of Engineering.

**1978–1998, TASC, Reading MA (<http://www.tasc.com>).**

*Corporate Research Scientist*, Office of the Chief Technical Officer. Responsible for research involving the definition, development, and demonstration of new information technologies based on advanced analytical and computational techniques.

**1973–78, CBS Technology Center, Stamford CT.**

*Staff Scientist*, Department of Sound Reproduction Technology. Responsible for research and development in disc recording, signal processing, and electroacoustics. Represented CBS on the International Digital Standards Committee of the Audio Engineering Society.

**1970–73, Stevens Institute of Technology, Hoboken NJ.**

*Assistant Professor*, Department of Mechanical Engineering. Taught control theory, mechanics, system dynamics, strength of materials, and engineering experimentation. Supervised student work in acoustics.

**1968–73, Cambridge MA and Hoboken NJ.**

*Independent Consultant* on controls, acoustics, and sound reproduction.

**1960–64, Jensen Manufacturing Co., Chicago IL.**

*Student Engineer* (through Northwestern University Industrial Cooperative Plan.)

**1957–64, J.V. Acoustics, Hammond IN.**

*Independent consultant* on noise control and sound reproduction.

**Awards**

Tau Beta Pi

Elected Fellow of the Audio Engineering Society

Recipient, Publications Award, Audio Engineering Society for Authors Under 35 Years of Age

**Professional Societies**

Acoustical Society of America

American Geophysical Union

American Mathematical Society

American Statistical Association

Audio Engineering Society

Institute of Electrical and Electronic Engineers

Institute of Mathematical Statistics

International Society for Bayesian Analysis

Society for Industrial and Applied Mathematics

**Patents**

1. “Methods and Compositions for the Identification, Assessment, Prevention, and Therapy of Human Cancers,” Filed February 16, 2001.
2. “Apparatus for Embossing Information on a Disc,” United States Patent No. 3,946,149, 1976.

**Reports, Working Papers, Conference Papers, and Seminar Presentations**

Does not include the papers I wrote during my years at Alphatech and BAE Systems.

1. White, J.V., "Analysis of Scoring Errors," client Seminar Presentation SP117-9, presented at the Roth Lab, Harvard Medical School, Boston, MA, January 17, 2003.
2. White, J.V., "Cross-validated Correlations between Expert and Probabilistic Scores," client Seminar Presentation SP117-8, presented at the Roth Lab, Harvard Medical School, Boston, MA, January 3, 2003.
3. White, J.V., "Comparison of Experts Scores with Cross-validated Probabilistic Scores," client Seminar Presentation SP117-6, presented at the Roth Lab, Harvard Medical School, Boston, MA, December 20, 2002.
4. White, J.V., "Analysis of the SGD/GO Evidence Reliability Survey," client Seminar Presentation SP117-5, presented at the Roth Lab, Harvard Medical School, Boston, MA, August 13, 2002.
5. White, J.V., "Proposed Baseline Structure for Modeling Drug Use and Sales," Working Paper WP-124-1, JVWhite.Com, Cambridge, MA, July 18, 2002.
6. White, J.V., "Algorithm AM2 for identifying anomalous measurements in high-throughput screening," Working Paper WP-122-2, JVWhite.Com, Cambridge, MA, May 10, 2002.
7. White, J.V., "Specifying means and covariances with incomplete data sets," Working Paper WP122-1, JVWhite.Com, Cambridge, MA, April 9, 2002.
8. White, J.V., "Introduction to Decision Theory with Possible Applications to GOFISH," client Seminar Presentation SP117-4, presented at the Roth Lab, Harvard Medical School, Boston, MA, April 8, 2002.
9. White, J.V., "Proposed Technical Approach for Analyzing High-throughput Screening Data," client Seminar Presentation SP122-1, JVWhite.Com, Cambridge MA, April 3, 2002.
10. White, J.V., "OLE for Estimating Joint Probabilities," Working Paper WP117-10, JVWhite.Com, Cambridge, MA, March 20, 2002.
11. White, J.V., "OLE for Discovering New Hypotheses," Working Paper WP117-9, JVWhite.Com, Cambridge, MA, March 11, 2002.
12. White, J.V., "Comparison of Logistic Regression with Optimal Linear Estimation," Working Paper WP117-8, JVWhite.Com, Cambridge, MA, Feb. 13, 2002.
13. White, J.V., "Eliciting Beliefs and Modeling with Probabilities," Working Paper WP117-7, JVWhite.Com, Cambridge, MA, Jan. 30, 2002.
14. White, J.V., "Probabilistic Annotations for Protein Ontologies, Baseline Formulation," client Seminar Presentation SP117-3, presented at the Roth Lab, Harvard Medical School, Boston, MA, January 22, 2002.
15. White, J.V., "Algorithmic Bayesian Framework for Modeling Ranked Lists," Working Paper WP120-2, JVWhite.Com, Cambridge, MA, Jan. 10, 2002.

16. White, J.V., "Optimal Linear Estimation," Working Paper WP117-6, JVWhite.Com, Cambridge, MA, Jan. 4, 2002.
17. White, J.V., *User Notes for Marker Discovery and Validation Using ExMarkS 6*, Technical Report R101-4, JVWhite.Com, Cambridge, MA, December 17, 2001.
18. White, J.V., "Merging Two Ranked Lists of Targets," Working Paper WP120-1, JVWhite.Com, Cambridge, MA, Dec. 15, 2001.
19. White, J.V., "Simulation Study of the ExMarkS Algorithm, Version 6," client Seminar Presentation SP101-16, JVWhite.Com, Cambridge, MA, Dec. 12, 2001.
20. White, J.V., "Using Optimal Linear Estimation to Generate Biological Hypotheses," Seminar Presentation SP117-2, presented at the Roth Lab, Harvard Medical School, Boston, MA, Dec. 6, 2001.
21. White, J.V., *Discrete State-space Models for Ligands*, Technical Report R118-1, JVWhite.Com, Cambridge, MA, Oct. 24, 2001.
22. White, J.V., "An Improved Discrete State-Space Model for Chemokine Ligands," client Seminar Presentation SP118-3, JVWhite.Com, Cambridge, MA, Sep. 28, 2001.
23. White, J.V., "Attribute Graphs and Probabilities," client Seminar Presentation SP117-1, JVWhite.Com, Cambridge, MA, Aug. 29, 2001.
24. White, J.V., "A New Approach for Discovering GPCR Ligands," client Seminar Presentation SP118-2, JVWhite.Com, Cambridge, MA, Aug. 22, 2001.
25. White, J.V., "Theoretical Limits on Classifying Nucleotide Sequences," Working Paper WP117-3, JVWhite.Com, Cambridge, MA, August 6, 2001.
26. White, J.V., "Utility Matrices for Marker Genes," Working Paper WP101-9, JVWhite.Com, Cambridge, MA, June 13, 2001.
27. White, J.V., "Appendix: Algorithms for Bayesian Analysis of Gene Annotations" Working Paper WP117-2, JVWhite.Com, Cambridge, MA, June 12, 2001.
28. White, J.V., "Introduction to Discrete State Models for Amino Acid Sequences," client Seminar Presentation SP118-1, JVWhite.Com, Cambridge, MA, June 4, 2001.
29. White, J.V., "Highlights of the ExMarkS Algorithm, Version 6," client Seminar Presentation SP101-15, JVWhite.Com, Cambridge, MA, May 24, 2001.
30. White, J.V., "Magnus, Robostat, and TryQMs: New Automation Tools for Monitoring the Quality of DNA Microarrays," client Seminar Presentation SP115-7, JVWhite.Com, Cambridge, MA, May 4, 2001.
31. White, J.V. and Damokosh, A., "Simulating Gene Expression Data," Working Paper WP101-8, JVWhite.Com, Cambridge, MA, Aril 30, 2001.
32. White, J.V., "Methodology for Selecting Quality Metrics," client Seminar Presentation SP115-5, JVWhite.Com, Cambridge, MA, Feb. 27, 2001.

33. White, J.V., "Modeling Needles in Haystacks," client Seminar Presentation SP101-14, JVWhite.Com, Cambridge, MA, Feb. 1, 2001.
34. White, J.V., "Introduction to ELD2: A New Tool for Analyzing Microarray Data," client Seminar Presentation SP112-12, JVWhite.Com, Cambridge, MA, Jan. 30, 2001.
35. AgoulNIK, I., White, J.V., and Tirrell, S., "Automated Quality Control for Microarrays," Lab-on-a-Chip and Microarrays, Zurich, Switzerland, January 22-24, 2001.
36. White, J.V., "Modeling and Estimating Gene Attributes," Working Paper WP117-1, JVWhite.Com, Cambridge, MA, January 10, 2001.
37. White, J.V., "Search Concepts for Finding Marker Genes," client Seminar Presentation SP101-13, JVWhite.Com, Cambridge, MA, Nov. 9, 2000.
38. White, J.V., "Stochastic Models for ELD2," client Seminar Presentation SP112-11, JVWhite.Com, Cambridge, MA, Nov. 3, 2000.
39. White, J.V., "Introduction to ELD2 and MAGNUS, New Tools for Analyzing Microarray Data," client Seminar Presentation SP101-12, JVWhite.Com, Cambridge, MA, Oct. 10, 2000.
40. White, J.V., "Applying the Extended ELD Algorithm in Practice," client Seminar Presentation SP112-10, JVWhite.Com, Cambridge, MA, July 7, 2000.
41. White, J.V., "Extending ELD to Include Spot Locations: Progress Review," client Seminar Presentation SP112-9, JVWhite.Com, Cambridge, MA, June 23, 2000.
42. White, J.V., "Screen Shots of ExMarkS Dialog Boxes," client Seminar Presentation SP101-11, JVWhite.Com, Cambridge, MA, June 8, 2000.
43. White, J.V., "A New ELD for Gene-Centric Analyses Progress Review," client Seminar Presentation SP112-8, JVWhite.Com, Cambridge, MA, May 31, 2000.
44. White, J.V., "Extending ELD for Gene-Centric Analyses: Progress Report and Sample Results," client Seminar Presentation SP112-7, JVWhite.Com, Cambridge, MA, May 15, 2000.
45. White, J.V., "Introduction to ELD2 and MAGNUS, New Tools for Analyzing Microarray Data," client Seminar Presentation SP101-10, JVWhite.Com, Cambridge, MA, April 13, 2000.
46. White, J.V., "Extending ELD for Gene-Centric Analyses: Detection Probabilities, Noise Modeling, and Optimal Estimation," client Seminar Presentation SP112-6, JVWhite.Com, Cambridge, MA, April 7, 2000.
47. White, J.V., "Extending ELD for Gene-Centric Analyses: False Alarms and Expression States," client Seminar Presentation SP112-5, JVWhite.Com, Cambridge, MA, April 4, 2000.
48. White, J.V., "Gene-Centric Analyses of DNA Array Data," client Seminar Presentation SP112-4, JVWhite.Com, Cambridge, MA, Mar. 13, 2000.
49. Roth, F.P. and White, J.V., "Hierarchical Modeling of mRNA Expression-Level Measurements for Calibration and Estimation," Working Paper WP101-5, JVWhite.Com, Cambridge, MA, March 3, 2000.

50. White, J.V., "Proposed Quality Metrics for Replicated Array Data," client Seminar Presentation SP112-3, JVWhite.Com, Cambridge, MA, Feb. 22, 2000.
51. Roth, F.P. and White, J.V., *ExMarkS<sup>TM</sup> Version 1.0 User Notes*, Technical Report R101-3, JVWhite.Com, Cambridge, MA, Jan. 26, 2000.
52. White, J.V., *Models for the Markov-Chain Monte-Carlo Analysis of Thresholded Mass Spectra*, Technical Report R113-1, JVWhite.Com, Cambridge, MA, Jan. 10, 2000.
53. White, J.V., "Magnus: a Tool for Monitoring the Quality of Microarray Data," client Seminar Presentation SP115-2, JVWhite.Com, Cambridge, MA, Oct. 17, 2000.
54. White, J.V., "Thresholding MS Spectra, Further Analysis Results," client Seminar Presentation SP113-3, JVWhite.Com, Cambridge, MA, April 28, 2000.
55. White, J.V., "Thresholding MS Spectra, Data Sets 3 and 4," client Seminar Presentation SP113-2, JVWhite.Com, Cambridge, MA, March 3, 2000.
56. White, J.V., "Quality Metrics for Paired Transcriptional Profiles," client Seminar Presentation SP112-1, JVWhite.Com, Cambridge, MA, Jan. 5, 2000.
57. Roth, F.P., White, J.V., Van Huffel, C.H., Li, B., Bryant, B., O'Connor, K.S., Lillie, J.W., Shyjan, A., Kauffman, M.G., & Sander, C., *ExMarkS<sup>TM</sup>: A New Algorithm for Finding Marker Genes and Its Application to Paclitaxel Sensitivity*, Technical Report R101-2, JVWhite.Com, Cambridge, MA, Jan. 4, 2000.
58. White, J.V., "Modeling Expression Level Measurements with Incomplete Data Sets," Working Paper WP101-4, JVWhite.Com, Cambridge, MA, Dec. 29, 1999.
59. White, J.V., "Thresholding MS Spectra, Performance Tradeoffs," client Seminar Presentation SP113-1, JVWhite.Com, Cambridge, MA, Dec. 20, 1999.
60. White, J.V., Roth, F.P., Sander, C., Lillie, J.W., Kauffman, M.G., & Bryant, B., *Classifying Tissue Samples Based on mRNA Expression Levels*, Technical Report R101-1, JVWhite.Com, Cambridge, MA, Nov. 18, 1999.
61. White, J.V., "Predictive Density of a Normal Random Variable with Unknown Mean and Variance, Given  $n$  Samples," Working Paper WP101-3, JVWhite.Com, Cambridge, MA, Oct. 12, 1999.
62. White, J.V., "Classifying Tissue Samples Based on mRNA Expression Levels," Working Paper WP101-1, JVWhite.Com, Cambridge, MA, September 29, 1999.
63. White, J.V., Information Metrics for Classifying Tissue Samples Based on mRNA Expression Levels, Working Paper WP101-2, JVWhite.Com, Cambridge, MA, Sept. 15, 1999.
64. White, J.V., "Using Bin States to Define Theoretical MS/MS Spectra," Working Paper WP102-3, JVWhite.Com, Cambridge, MA, Sep. 9, 1999.
65. White, J.V., "Probabilistic Approach to Determining Amino Acid Sequences from MS/MS Spectra," Working Paper WP102-2, JVWhite.Com, Cambridge, MA, August 26, 1999.

66. White, J.V., "Matrix Formulation of Discrete Stochastic Models for MS/MS Spectra," Working Paper WP102-1, JVWhite.Com, Cambridge, MA, August 19, 1999.
67. White, J.V., "Marker Gene Identification Using Algorithm MGI," client Seminar Presentation SP101-9, JVWhite.Com, Cambridge, MA, July 25, 1999.
68. White, J.V., "Quality Measures for Marker Set Selection Algorithms," client Seminar Presentation SP101-8, JVWhite.Com, Cambridge, MA, May 18, 1999.
69. White, J.V., "Cross Validation Using Noise-Perturbed Hybes," client Seminar Presentation SP101-7, JVWhite.Com, Cambridge, MA, April 20, 1999.
70. White, J.V., "Quality Measures for Marker Set Selection Algorithms," client Seminar Presentation SP101-6, JVWhite.Com, Cambridge, MA, April 7, 1999.
71. White, J.V., "Searching for Marker Genes," client Seminar Presentation SP101-5, JVWhite.Com, Cambridge, MA, Mar. 31, 1999.
72. White, J.V., "Predicting Categorical Data," client Seminar Presentation SP101-4, JVWhite.Com, Cambridge, MA, Mar. 9, 1999.
73. White, J.V., "Canonical Variates Analysis with Realistic Noise Variances," client Seminar Presentation SP101-3, JVWhite.Com, Cambridge, MA, Feb. 15, 1999.
74. White, J.V., "Modeling Repeatability Using ELD6", client Seminar Presentation SP101-2, JVWhite.Com, Cambridge, MA, Feb. 1, 1999.
75. White, J.V., "Predicting Drug Sensitivity from Transcriptional Profiles," client Seminar Presentation SP101-1, JVWhite.Com, Cambridge, MA, Jan. 6, 1999.
76. White, J.V., "The Virtual Investment Company," Working Paper, TASC, Inc., Reading, MA, Sep. 3, 1998.
77. White, J.V., "Matlab Functions for Stochastic Modeling and Kalman Filtering," TASC working paper, Aug. 17, 1998.
78. White, J.V., "Smoother for DSMs," TASC/BU working paper, June 6, 1998.
79. White, J.V., "Version Five of Baseline Algorithm for Estimating Expression Levels and Detecting Significant Differences," client Seminar Presentation, TASC, Inc., Reading, MA, May, 29, 1998.
80. White, J.V., "Baseline Algorithm for Estimating Expression Levels and Detecting Significant Differences," client Seminar Presentation, TASC, Inc., Reading, MA, May, 19, 1998.
81. White, J.V., "Experimental Variability and Selection of Data," client Seminar Presentation, TASC, Inc., Reading, MA, May 4, 1998.
82. White, J.V., "Significant Differences between Treatment and Control Responses," client Seminar Presentation, TASC, Inc., Reading, MA, Apr. 10, 1998.
83. White, J.V., "Statistical Analysis of Transcriptional Profiles," client Seminar Presentation, TASC, Inc., Reading, MA, Apr. 3, 1998.

84. White, J.V., "Inferences about RMS Fix Errors," TASC Technical Memorandum, Dec. 1, 1997.
85. White, J.V., "Discrimination Information for Comparing Two Innovations State-Space Models," TASC Working Paper, Oct. 14, 1997.
86. White, J.V., "Probability of Exceeding a Financial Objective, Part 1," TASC Working Paper, Oct. 2, 1997.
87. White, J.V., "Probability of Exceeding a Financial Objective, Part 2," TASC Working Paper, Aug. 11, 1997.
88. White, J.V., Driscoll, M.L., and Sailor, R.V., "The Proposed EAF Method for Measuring Noise Levels in Satellite Radar Altimeter Data," TASC working paper, Aug. 4, 1997.
89. Yu, Lihua, White, James V., and Smith, Temple F., "Improved Protein Family Recognition by Combining Sequence and Structure Information," Eleventh Symposium of Protein Society, Boston, July, 12 – 16, 1997.
90. White, J.V., "Changing State-Space Models from Extended Form to Innovations Form," TASC Working Paper, Apr. 14, 1997.
91. White, J.V., "Kalman Filter for Discrete-Time State-Space Models in the ABCD Formalism," TASC working paper, Apr. 11, 1997.
92. White, J.V., "Monte Carlo Demonstration of Generalized Linear Regression," TASC/MIT working paper, Jan. 22, 1997.
93. White, J.V., "Probabilistic Model for Interpreting Simulations of Bathymetric Fixing Errors," TASC working paper, Jan.3, 1997.
94. White, J.V., "Probabilistic Inferences About Fixability," TASC working paper, January, 1997.
95. White, J.V., "Covariance Modeling Based on Generalized Linear Regression," TASC/MIT working paper, January, 1997.
96. White, J.V., "Generalized Linear Regression," TASC/MIT working paper, December, 1996.
97. White, J.V., "Confidence Intervals for the Median Based on Order Statistics," TASC working paper, Oct. 30, 1996.
98. White, J.V., "Attributes of Bathymetry Swath Segments," TASC working paper, Oct. 18, 1996.
99. White, J.V., "An Introduction to State-Space Models for Risk," TASC/MIT working paper, Oct. 11, 1996.
100. White, J.V., "A Kalman Filtering Approach to Estimating Expected Rates of Return," TASC/MIT working paper, July, 1996.
101. White, J.V., "Factor Models for Risk," TASC/MIT working paper, June, 1996.
102. White, J.V., "Sectorized Probabilistic Risk Models," TASC/MIT working paper, May, 1996.

103. White, J.V., "Notes on Information Measures," TASC/BU working paper, March 12, 1996.
104. White, J.V., Stultz, C.M., Yu, L., and Smith, T.F., "Structural Analysis Using Probabilistic Domain Models," *Protein Science*, (abstract) vol. 4, suppl. 2, p. 86, Ninth Symposium Protein Society, Boston, Program 129-S, July, 1995.
105. White, J.V., "A State-Space Framework for Modeling the Term Structure of Interest Rates," TASC working paper, April, 1995.
106. White, J.V., "Signal-to-Noise Ratios for Pairwise Scores," TASC/BU working paper, Apr. 4, 1995.
107. White, J.V., "Dynamic Modeling of the Term Structure of Interest Rates," TASC Technical Seminar, Reading MA, February 1995.
108. Kafka, A.L., Comer, R.P., and White, J.V., "Site Effects at a Small-aperture Seismic Array surrounding Weston Observatory," 89th Annual Meeting Seismological Society of America, Pasadena, 1994.
109. Comer, R.P., Marcus, D.J., and White, J.V., "Global Seismic Evidence Combination," 14th PL/DARPA Seismic Research Symposium, Tucson, Arizona, September 1992.
110. Broder, B., Whitney, D.A., and White, J.V., "Hyperstate Models for Multiresolution Signal Analysis and Data Fusion," 152nd joint meeting of the American Statistical Association and the Institute of Mathematical Statistics, Boston, August 1992.
111. Dionisio, C., Zelli, C., Borgarelli, L., Sailor, R.V., Driscoll, M.L., and White, J.V., "Preliminary Noise Models for ERS-1 Satellite Altimeter Data," American Geophysical Union Spring Meeting, Montreal, May, 1992.
112. Broder, B., Whitney, D.A., White, J.V., and Marchak, F., "Multiresolution Markov Models: Analysis and Visualization," Interface '92, 24th Symposium on the Interface, Computing Science and Statistics, College Station, Texas, March 1992.
113. White, J.V., "The Canonical-Variates Algorithm for Stochastic State-Space Modeling," TASC working paper, July, 1991.
114. White, J.V., "Modeling and Optimal Filtering of Aligned Clusters," TASC/BU working paper, Feb. 20, 1992.
115. Smith, T.F., White, J.V., and Stultz, C.M., "Predicting Protein Structural Class from Primary Sequence," *Genome Analysis: DNA Sequence to Protein Structure*, Santa Fe, NM, April 1991.
116. White, J.V., "Predicting Protein Structures from Genetic Codes by Nonlinear Filtering," Research Seminar at TASC, Reading MA, March 1991.
117. White, J.V., "Warranty-Cost Prediction via State-Space Modeling," Research Seminar, Ford Motor Company, Dearborn MI, April 1991.
118. White, J.V., "Predicting the Tertiary Structural Class of a Protein from Its Amino-Acid Sequence Using State-Space Models and Bayesian Filters," Colloquium of the Biostatistics Department, Harvard School of Public Health, March 1991.

119. White, J.V., "Stochastic Modeling of Alpha Protein Structure," Research Seminar, Molecular Biology Computer Research Resource, Dana-Farber Cancer Institute, November 1988.
120. White, J.V., "Inferring Secondary Structure from Amino Acid Sequences Using State-Space Models and Bayesian Filters," Research Seminar, Molecular Biology Computer Research Resource, Dana-Farber Cancer Institute, October 1988.
121. White, J.V., Goldstein, J.D., and Brammer, R.F., "Model-Based Target Tracking," presented at the Fourth International Symposium on Science and Engineering on Cray Supercomputers, October 1988.
122. Brzezowski, Belarson, D., Goldstein, J., Heller, W., Jekeli, C., and White, J., "Synopsis of Early Field Test Results from the Gravity Gradiometer Survey System," Chapman Conference on Progress in the Determination of the Earth's Gravity Field, Ft. Lauderdale, FL, September 1988.
123. White, J.V., Driscoll, M.L., and Brammer, R.F., "Bayesian Target Tracking Based on Quantized Noisy Data," *Third International Conference on Supercomputing*, Boston, MA, Vol. 2, pp. 380–389, May 1988.
124. Comer, R.P., Driscoll, M.L., White, J.V., and Sailor, R.V., "Seismic Phase Detection and Identification Based on Autoregressive Analysis of Seismograms," *Transactions, American Geophysical Union*, (abstract) Vol. 69, No. 16, p. 407, April 1988.
125. Brzezowski, S.J., Goldstein, J.D., Heller, W.G., and White, J.V., "Gravity Gradiometer Survey System (GGSS) Airborne Test Data Reduction Results," Sixteenth Moving Base Gravity Gradiometer Review, United States Air Force Academy, Colorado Springs, 10 February 1988.
126. White, J.V., "Discrete State-Space Models," Research Seminar, Industrial Liaison Program, Massachusetts Institute of Technology, Cambridge, MA, 27 January 1988.
127. White, J.V., "Application of Information Theory to Discriminating Against Incorrect Signal Models," Digital Signal Processing Seminar, Massachusetts Institute of Technology, Cambridge, MA 02139, 9 October 1985.
128. White, J.V. and Capp, D.W., "Estimation of Geoid Profiles from Bathymetry and Satellite Altimetry," *EOS, Trans. Am. Geoph. Union*, (abstract) Vol. 64, No. 18, p. 211, May 3, 1983.
129. Goldstein, J.D. and White, J.V., "A Template Approach to GGSS Data Reduction," Thirteenth Moving Base Gravity Gradiometer Review, United States Air Force Academy, Colorado Springs, February 1985.
130. White, J.V., "Demonstration of Automatic Boundary-Current Detection and Geostrophic Velocity Estimation Using SEASAT Altimeter Data," *Transactions, American Geophysical Union*, (abstract) Vol. 63, No. 18, p. 363, May 1982.
131. Lazarewicz, A.R., White, J.V., Schwank, D.C., and Sailor, R.V., "Locating Uncharted Seamounts Using Satellite Altimetry," *Transactions, American Geophysical Union*, (abstract) Vol. 62, No. 45, p. 929, November 1981.

132. LeSchack, A.R. and White, J.V., "Analysis of Vondrak Smoothing as Used in Geodesy," *Transactions, American Geophysical Union*, (abstract) Vol. 62, No. 45, p. 842, November 1981.
133. Sailor, R.V. and White, J.V., "High-Resolution Power Spectra of Split Normal Modes Using Time-Domain AR Models," *Transactions, American Geophysical Union*, (abstract) Vol. 62, No. 17, p. 337, April 1981.
134. White, J.V., Lazarewicz, A.R., and LeSchack, A.R., "Estimation of Oceanographic Signals in SEASAT Altimetry via Kalman Smoothing," *Transactions, American Geophysical Union*, (abstract) Vol. 62, No. 17, p. 298, April 1981.
135. Lazarewicz, A.R., White, J.V., and Sailor, R.V., "Geostrophic Current Velocity Determination from Satellite Altimetry," *Transactions, American Geophysical Union*, (abstract) Vol. 62, No. 17, p. 298, April 1981.
136. Lazarewicz, A.R., White, J.V., and Schwank, D.C., "Examples of Ocean-Current and Seamount Detection Using SEASAT Altimeter Data and Matched Filters," *Transactions, American Geophysical Union*, (abstract) Vol. 61, No. 46, p. 993, November 1980.
137. Sailor, A.R., LeSchack, A.R., and White, J.V., "Comparison of Methods for Detecting Mesoscale Oceanographic Features in Altimeter Data," *Transactions, American Geophysical Union*, (abstract) Vol. 61, No. 17, p. 208, April 1980.
138. LeSchack, A.R., White, J.V., and Sailor, R.V., "Multiple-Track Matched Filtering for Feature Extraction from Altimeter Data," *Transactions, American Geophysical Union*, (abstract) Vol. 61, No. 17, p. 208, April 1980.
139. White, J.V., "A New Method for Measuring Tracing and Tracking Distortions in Phonographs," technical seminar at the CBS Technology Center, 14 Dec. 1977.
140. White, J.V. and Gust, A., "Separate but Simultaneous Measurements of Tracing and Tracking Distortions," 58-th Convention of the Audio Engineering Society, 5 November 1977.
141. White, J.V., "Nonlinear distortion in Phonograph Reproduction," 54-th Convention of the Audio Engineering Society, May 4, 1976.
142. White, J.V., "Distortion in Disc Recording Systems," IEEE International Conference on Acoustics, Speech, and Signal Processing, April 13, 1976.
143. White, J.V., "Distortion in Disc Recording Systems," IEEE International Conference on Acoustics, Speech, and Signal Processing, April 13, 1976.

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