

PUBLICATIONS

Günther Palm

Books

- 1) Palm, G.: Entropie und Generatoren in dynamischen Verbänden. Dissertation, Tübingen, 1975
- 2) Heim, R., Palm, G. (eds.): Theoretical Approaches to Complex Systems. Springer, Berlin, Heidelberg, New York, 1978
- 3) Palm, G.: Neural Assemblies. An Alternative Approach to Artificial Intelligence. Springer, Berlin, Heidelberg, New York, 1982
- 4) Palm, G., Aertsen, A. (eds.): Brain Theory. Springer, Berlin, Heidelberg, New York, Tokyo, 1986
- 5) Shaw, G.L., Palm, G. (eds.): Brain Theory Reprint Volume. World Scientific, Singapore, New Jersey, Hong Kong, 1988
- 6) Strube, G., Becker, B., Freksa, Ch., Hahn, U., Opwis, K., Palm, G. (Hrsg.): Wörterbuch der Kognitionswissenschaft. Klett-Cotta, Stuttgart, 1996
- 7) Loganathanraj, R., Palm, G., Ali, M. (eds.): Intelligent Problem Solving. Methodologies and Approaches. Proceedings 13th International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, IEA/AIE 2000. Lecture Notes in Artificial Intelligence 1821, Subseries of Lecture Notes in Computer Science. Springer, Berlin, Heidelberg, New York, Barcelona, Hong Kong, London, Milan, Paris, Singapore, Tokyo, 2000
- 8) Biundo, S., Frühwirth, Th., Palm, G. (eds.): KI 2004: Advances in Artificial Intelligence. Proceedings of the 27th Annual German Conference on AI (KI 2004). LNAI 3238, Springer, Berlin, Heidelberg, 2004
- 9) Palm, G., Wermter, S (eds.): NeuroBotics. Proceedings of the NeuroBotics-Workshop at the 27th German Conference on Artificial Intelligence (KI-2004), Ulm, Germany, 2004
- 10) Wermter, S., Palm, G., Elshaw, M. (eds.): Biomimetic Neural Learning for Intelligent Robots. Intelligent Systems, Cognitive Robotics, and Neuroscience. LNAI 3575, Springer, Berlin, Heidelberg, 2005
- 11) Palm,G.: Novelty, Information and Surprise. Springer, 2012
- 12) Villa, A.E.P., Duch, W., Erdi, P., Masulli, F., Palm, G. (eds.): Artificial Neural Networks and Machine Learning – ICANN 2012. Proc. 22rd Int. Conference on Artificial Neural Networks, Part I and II. LNCS 7552, Springer, 2012

- 13) Mladenov, V., Koprinkova-Hristova, P., Palm, G., Villa, A.E.P., Appollini, B., Kasabov, N. (eds.): Artificial Neural Networks and Machine Learning – ICANN 2013. Proc. 23rd Int. Conference on Artificial Neural Networks. LNCS 8131, Springer, 2013
- 14) Wermter, S., Weber, C., Duch, W., Honkela, T., Koprinkova-Hristova, Pl., Magg, S., Palm, G., Villa, A.E.P. (eds.): Artificial Neural Networks and Machine Learning – ICANN 2014. Proc. 24th Int. Conference on Artificial Neural Networks. LNCS 8681, Springer, 2014

Peer-reviewed articles

1. G. Palm: On the Selection Model for a Sex-Linked Locus. *J. Math. Biology* 1, 47-50, 1974
2. G. Palm: Entropie und Erzeuger in dynamischen Verbänden. *Z. Wahrscheinlichkeitstheorie verw. Gebiete* 36, 27-45, 1976
3. G. Palm: A Common Generalization of Topological and Measure-Theoretic-Entropy. *Asterisque* 40, 159-165, 1976
4. G. Palm und T. Poggio: Wiener-Like System Identification in Physiology. *J. Math. Biology* 4, 375-381, 1977
5. G. Palm und T. Poggio: The Volterra Representation and the Wiener Expansion: Validity and Pitfalls. *SIAM J. Appl. Math.* 33, 195-216, 1977
6. H.-J. Besenfelder und G. Palm: Einige Äquivalenzen zur Riemannschen Vermutung. *Journal f.d. reine und angewandte Math.* 293/294, 109-115, 1977
7. M. Kern, R. Nagel und G. Palm: Dilations of Positive Operators: Construction and Ergodic Theory. *Math. Z.* 156, 265-277, 1977
8. G. Palm: Additive Entropy Requires Additive Measure. *Arch. der Math.* 30, 293-296, 1978
9. G. Palm: On Representation and Approximation of Nonlinear Systems. *Biol. Cybernetics* 31, 119-124, 1978
10. G. Palm und T. Poggio: Stochastic Identification Methods for Nonlinear Systems: an Extension of the Wiener Theory. *SIAM J: Appl. Math* 34, 524-534, 1978
11. D. Marr, G. Palm und T. Poggio: Analysis of a Cooperative Stereo Algorithm. *Biol. Cybernetics* 28, 223-239, 1978
12. G. Palm: On Representation and Approximation of Nonlinear Systems. Part II: Discrete Time. *Biol. Cybernetics* 34, 49-52, 1979

13. G. Palm und V. Braitenberg: Tentative Contributions of Neuroanatomy to Nerve Net Theories. In: *Progress in Cybernetics and System Research*, Vol. 3 (R. Trappl, G.J. Klir, L. Ricciardi, eds.), Hemisphere Publishing Corporation, Washington, London, 1979
14. G. Palm: On Associative Memory. *Biol. Cybernetics* 36, 19-31, 1980
15. H.J. Bentz und G. Palm: Wahrscheinlichkeitstheorie ohne Mengenlehre (Common Sense Probability). *Math. Did.* 3, 167-183, 1980
16. G. Palm: On the Storage Capacity of an Associative Memory with Randomly Distributed Storage Elements. *Biol. Cybernetics* 39, 125-127, 1981
17. G. Palm: Towards a Theory of Cell Assemblies. *Biol. Cybernetics* 39, 181-194, 1981
18. G. Palm: Evidence, Information and Surprise. *Biol. Cybernetics* 42, 57-68, 1981
19. G. Palm: Rules for Synaptic Changes and their Relevance for the Storage of Information in the Brain. In: *Cybernetics and Systems Research* (R. Trappl, ed.), North-Holland Publishing Company, 1982
20. R. Nagel und G. Palm: Lattice Dilations of Positive Contractions on L^p -Spaces. *Canad. Math. Bull.* 25, 371-374, 1982
21. G. Palm: Wo kommen die Wahrscheinlichkeiten eigentlich her? *Mathematik-Unterricht*, 29/1, 50-61, 1983
22. M. Fahle und G. Palm: Calculation of Surface Areas from Serial Sections. *J. Neuroscience Methods*, 65-75, 1983
23. G. Palm: Evolutionary Stable Strategies and Game Dynamics for n-person Games. *J. Math. Biology* 19, 329-334, 1984
24. G. Palm und T. Bonhoeffer: Parallel Processing for Associative and Neuronal Networks. *Biol. Cybernetics* 51, 201-204, 1984
25. G. Palm: Associative Networks and their Information Storage Capacity. *Cognitive Systems* 1, 107-118, 1985
26. G. Palm und B. Pöpel: Volterra Representation and Wiener-like Identification of Nonlinear Systems: Scope and Limitations. *Quarterly Rev. Biophys.* 18, 135-164, 1985
27. G. Krone, H. Mallot, G. Palm und A. Schüz: Spatio-Temporal Receptive Fields: a Dynamical Model Derived from Cortical Architectonics. *Proc. Royal Soc. London B* 226, 421-444, 1986
28. G. Palm: Computing with Neural Networks. *Science* 235, 1227-1228, 1987
29. G. Palm: On Associative Memories. In: *Physics of Cognitive Processes*. (E. R. Caianiello, ed.) World Scientific Publ., Singapore, 380-422, 1987

30. P.I. Ruff, J.P. Rauschecker und G. Palm: A Model of Direction-Selective "Simple" Cells in the Visual Cortex Based on Inhibition Asymmetry. *Biological Cybernetics*, 57, 147-157, 1987
31. G. Palm, A.M.H.J. Aertsen und G. L. Gerstein: On the Significance of Correlation Among Neuronal Spike Trains. *Biological Cybernetics* 59, 1-11, 1988
32. G. Palm: On the Asymptotic Information Storage Capacity of Neural Networks. In: *Neural Computers*. (R. Eckmiller und Ch. v. d. Malsburg, eds.) Springer, Berlin, Heidelberg, New York, 1988
33. G. Palm: Assoziatives Gedächtnis und Gehirntheorie. *Spektrum der Wissenschaft*, 54-64, 1988
34. Erb, M., Palm, G.: Lernen und Informationsspeicherung in neuronalen Netzen. In: *Digitale Speicher: Vorträge der ITG-Fachtagung im September 1988 in Darmstadt*. ITG-Fachbericht, vde-verlag gmbh, Berlin, Offenbach, 1988
35. A.M.H.J. Aertsen, G.L. Gerstein, M.K. Habib und G. Palm: Dynamics of Neuronal Firing Correlation: Modulation of "Effective Connectivity". *J. Neurophysiol.* 61, 900-917, 1989
36. H.J. Bentz, M. Hagstroem und G. Palm: Information Storage and Effective Data Retrieval in Sparse Matrices. *Neural Networks* 2, 289-293, 1989
37. Schüz und G. Palm: Density of Neurons and Synapses in the Cerebral Cortex of the Mouse. *Journal of Comparative Neurology* 286, 442-455, 1989
38. Palm, G.: Local Rules for Synaptic Modification in Neural Networks. In: *Computational Neuroscience* (E.L. Schwartz ed.). MIT, Cambridge, London, 1990
39. Palm, G.: Cell Assemblies as a Guideline for Brain Research. *Concepts in Neuroscience* 1, 133-148, 1990
40. Palm, G.: Local Learning Rules and Sparse Coding in Neural Networks. In: 'Advanced Neural Computers' (R. Eckmiller, ed.), North-Holland, Amsterdam, 1990
41. Palm, G.: Memory Capacities of Local Rules for Synaptic Modification. *Concepts in Neuroscience* 2, 97-128, 1991
42. Palm, G., Palm, M.: Parallel Associative Networks: The Pan-System and the Bacchus-Chip. In: *Proceedings of the Second International Conference on Microelectronics for Neural Networks*, (U. Ramacher, U. Rückert & J.A. Nossek, eds.), 411-416. Kyrill & Method, 1991
43. Palm, G., Rückert, U., Ultsch, A.: Wissensverarbeitung in neuronaler Architektur. In: *Informatik-Fachberichte 1991: Verteilte Künstliche Intelligenz und kooperatives*

Arbeiten (W. Bauer, D. Hernández, Hrsg.), Springer, Berlin, Heidelberg, New York, 1991

44. Fahle, M., Palm, G.: Perceptual Rivalry between Illusory and Real Contours. *Biol. Cybern.* 66, 1-8, 1991
45. Schwenker, F., Sommer, F., Palm, G.: Retrieval in a Feedback Associative Memory for Sparsely Coded Patterns. In: *Proceedings Symposium on Neural Networks*, 65, 1991
46. Palm, G.: On the Information Storage Capacity of Local Learning Rules. *Neural Computation* 4, 703-711, 1992
47. Palm, G., Sommer, F.T.: Information Capacity in Recurrent McCulloch-Pitts Networks with Sparsely Coded Memory States. *Network* 3, 177-186, 1992
48. Palm, G., Sommer, F.T.: Information and Pattern Capacities in Neural Associative Memories with Feedback for Sparse Memory Patterns. In: *Neural Network Dynamics - Proceedings of the Workshop on Complex Dynamics in Neural Networks* (J.G. Taylor, E.R. Caianiello, R.M.J. Cotterill, J.W. Clark, eds.), 3-18, Springer, London, 1992
49. Palm, G.: On the Internal Structure of Cell Assemblies. In: *Brain Theory* (A. Aertsen, ed.), 261-270, Elsevier, Amsterdam, 1993
50. Palm, G.: Cell Assemblies, Coherence and Cortico-Hippocampal Interplay. *Hippocampus*, Vol. 3, 1 Special Issue (Nitsch, R., Ohm, T.G, eds.), 219-225, 1993
51. Palm, G.: The PAN System and the WINA Project. In: *Euro-ARCH '93. Europäischer Informatik Kongreß Architektur von Rechensystemen Euro-ARCH '93* (Spies, P.P., Hrsg.), 142-156, Springer, Berlin, Heidelberg, 1993
52. Insauri, R., Belichenko, P., Frotscher, M., Matus, A., Monyer, H., Palm, G., Steinhäuser, Ch.: Plasticity in the Entorhinal-Hippocampal System. *Hippocampus*, Vol. 3, 1 Special Issue, (Nitsch, R., Ohm, T.G., eds.), 289-292, 1993
53. Liu, L., He, J., Palm, G.: Perception of Stop Consonants in Speech Signals Reconstructed from Phase or Amplitude. *J. Acoust. Soc. Am.* Vol. 94, 1882, 1993
54. Martignon, L., von Hasseln, H., Palm, G.: Modelling Stochastic Networks: From Data to the Connectivity Structure. In: *Grundlagen und Anwendungen der Künstlichen Intelligenz - 17. Fachtagung für Künstliche Intelligenz* (O. Herzog, Th Christaller, D. Schütt, eds). Informatik aktuell, Subreihe Künstliche Intelligenz, 50-58. Springer, 1993
55. Schwenker, F., Sommer, F., Palm, G.: Iterative Retrieval of Sparsely Coded Associative Memory Patterns. *Proceedings Neuronet '93*, Prag, 1993
56. Palm, G., Schwenker, F., Sommer, F.: Associative Memory Networks and Sparse Similarity Preserving Codes. In: *From Statistics to Neural Networks: Theory and Pattern Recognition Applications* (V. Cherkassky, J.H. Friedman, H. Wechsler, eds.), 283-302, NATO-ASI Series F, Springer, Berlin, Heidelberg, 1994

57. Palm, G., Ultsch, A., Goser, K., Rückert, U.: Knowledge Processing in Neural Networks. In: VLSI for Neural Networks and Artificial Intelligence (J.G. Delgado-Frias, ed.), 207-216, Plenum, New York, 1994
58. Aertsen, A., Erb, M., Palm, G.: Dynamics of Functional Coupling in the Cerebral Cortex: An Attempt at a Model-Based Interpretation. *Physica D* 75, 103-128, 1994
59. He, J., Liu, L., Palm, G.: A Text-Independent Speaker Identification System Based on Neural Networks. Proceedings of the International Conference on Spoken Language Processing (ICSLP 94), 1851-1854, Yokohama, Japan, 1994
60. He, J., Liu, L., Palm, G.: Perception of Stop Consonants in VCV Utterances Reconstructed from Partial Fourier Transform Information. Proceedings of the Fifth Australian International Conference on Speech, Science and Technology (SST-94), 436-441, Perth, Australien, 1994
61. Kestler, H.A., Höher, M., Schwenker, F., Palm, G., Hombach, V.: A Special Neural Network for Classification of QRS Complexes from High-Resolution Signal-Averaged Electrograms. NASPE, 16th Annual Scientific Session, 1994
62. Liu, L., He, J., Palm: Perception of Stop Consonants with Conflicting Phase and Magnitude. Proceedings of the Fifth Australian International Conference on Speech Science and Technology (SST-94), 442-447, Perth, Australien, 1994
63. Martignon, L., von Hasseln, H., Grün, S., Palm, G.: Modeling the Interactions in a Set of Neurons Implicit in their Frequency Distribution: A Possible Approach to Neural Assemblies. In: Biocybernetics (C. Taddei et al., eds.), Rosenberg Sellier Editors, Torino, 1994
64. Schwenker, F., Kestler, H.A., Palm, G., Höher, M.: Similarities of LVQ and RBF Learning - A Survey of Learning Rules and the Application to the Classification of Signals from High-Resolution Electrocardiography. Proceedings IEEE SMC, 646-651, 1994
65. Schwenker, F., Kestler, H.A., Palm, G.: A Comparison of LVQ and RBF Networks for Classification and Data Clustering. Proceedings 6th School on Neural Networks, 233-238, 1994
66. Sommer, F.T., Schwenker, F., Palm, G.: Assoziative Speicher als Module informationsverarbeitender Systeme. In: Tagungsband Workshop "Aspekte Neuronalen Lernens CoWAN'94" (L. Cromme, ed.) an der TU Cottbus, 1994
67. Bibbig, A., Wennekers, Th., Palm, G.: A Neural Network Model of the Cortico-Hippocampal Interplay and the Representation of Contexts. *Behavioural and Brain Research* 66, 169-175, 1995
68. He, J., Liu, L., Palm, G.: On the Use of Features from Prediction Residual Signals in Speaker Identification. Proceedings of EUROSPEECH'95, Vol. 1, 313-316, 1995

69. He, J., Liu, L., Palm, G.: Speaker Identification Using Hybrid LVQ-SLP Networks. Proceedings of IEEE International Conference on Neural Networks (ICNN'95), Vol. 4, 2052-2055, 1995
70. Höher, M., Kestler, H., Bauer, S., Weismüller, P., Palm, G., Hombach, V.: Neural Network Based Analysis of the Signal Averaged Electrocardiogram. In: IEEE Computers in Cardiology (Murray, A., Arzbaecher, R., eds.), 257-260, IEEE Computer Society, 1995
71. Kestler, H.A., Schwenker, M., Höher, M., Palm, G.: Adaptive Class Specific Partitioning as a Means of Initializing RBF Networks. In: Proceedings IEEE International Conference on Systems, Man and Cybernetics, 46-49, 1995
72. Liu, L., He, J., Palm, G.: Influence of Short-Time Phase on the Perception of Stop Consonants. Proceedings of EUROSPEECH'95, Vol. 3, 2269-2272, 1995
73. Martignon L., von Hasseln, H., Grün S., Aertsen A., Palm, G.: Detecting Higher-Order Interactions among the Spiking Events in a Group of Neurons. Biological Cybernetics 73, 69-81, 1995
74. Schwenker, F., Kestler, H.A., Höher, M., Palm, G.: Klassifikation hochverstärkter EKG Signale durch RBF Netze. In: Mustererkennung 1995 (G. Sagerer, S. Posch, F. Kummert, Hrsg.), 387-394, Springer, Berlin, Heidelberg, 1995
75. Schwenker, F., Palm, G.: Methoden zur Clusteranalyse und Visualisierung hochdimensionaler Datenmengen. In: Mustererkennung 1995 (G. Sagerer, S. Posch, F. Kummert, Hrsg.), 546-553, Springer, Berlin, Heidelberg, 1995
76. Wennekers, Th., Sommer, F.T., Palm, G.: Iterative Retrieval in Associative Memories by Threshold Control of Different Neural Models. In: Proceedings of the Workshop on Supercomputers in Brain Research. (Hermann, H.J., ed.). World Scientific Publishing Company, 1995
77. Palm, G., Schwenker, F.: Adaptive Analysis and Visualization in High Dimensional Data Spaces. In: Cybernetics and Systems, Volume 2 (Trappl, R., ed.). Proceedings of the 13th European Meeting on Cybernetics and Systems Research. Artificial Neural Networks and Adaptive Systems, 1009-1013. Austrian Society for Cybernetic Studies, Wien, 1996
78. Palm, G., Sommer, F.T.: Associative Data Storage and Retrieval in Neural Networks. In: Models of Neural Networks III. Association, Generalization, and Representation (E. Domany, J.L. van Hemmen, K. Schulten, eds.), 79-118. Springer, New York, 1996,
79. Bibbig, A. Wennekers, Th., Palm, G.: A Neural Network Model of the Cortico-Hippocampal Interplay: Contexts and Generalization. In: Engineering Applications of Artificial Intelligence, Vol. 9, No. 2, 145-151, 1996

80. El Gayar, N., Ismail, M.A., Schwenker, F., Palm, G.: A Comparative Study of Different Fuzzy and Conventional Neural Network Models for Data Clustering. In: Proceedings European Workshop on Fuzzy Decision Analysis for Management, Planning and Optimization (EFDAN'96), Dortmund, 05/96. 19-24, 1996
81. He, J., Liu, L., Palm, G.: On the Use of Residual Cepstrum in Speech Recognition. In: Proceedings IEEE, ICASSP'96, Vol. 1, 5-8. Atlanta, USA, 1996
82. Kestler, H., Höher, M., Palm, G., Kochs, M., Hombach, V.: Time Domain Variability of High Resolution Beat-to-Beat Recordings Classified by Neural Networks. In: Proceedings of Computers in Cardiology, IEEE Computer Society, 317-320, 1996
83. Liu, L., He, J., Palm, G.: Signal Modeling for Speaker Identification. In: Proceedings IEEE ICASSP'96, Vol. 2, 664-668. Atlanta, USA, 1996
84. Schwenker, F., He, J. Kestler, H., Littmann, E., Schieszl, S., Palm, G.: Anwendungen neuronaler Netze. In: Finanzmarktanalyse und -prognose mit innovativen quantitativen Verfahren. Proceedings 5. Ökonometrie Workshop, Karlsruhe 1995 (G. Bol, G. Nakhaeizadeh, K.H. Vollmer, Hrsg.), 35-69, Physica, Heidelberg, 1996
85. Schwenker, F., Kestler, H.A., Palm, G.: Visualization and Analysis of Signal Averaged High Resolution Electrocardiograms Employing Cluster Analysis and Multidimensional Scaling. In: Proceedings of the IEEE International Conference on Computers in Cardiology (Murray, A., Arzbaecher, R., eds.), 453-456. IEEE Computer Society, 1996
86. Schwenker, F., Sommer, F.T., Palm, G.: Iterative Retrieval of Sparsely Coded Associative Memory Patterns. Neural Networks, Vol. 9, No. 3, 445-455, 1996
87. Wennekers, T., Palm, G.: Controlling the speed of Synfire chains. In: Artificial Neural Networks - ICANN 96 (C. von der Malsburg et al., eds.). Proceedings International Conference, Bochum, July 1996. Lecture Notes in Computer Science, Vol. 1112, 451-456, Springer, Berlin, 1996
88. Palm, G., Schwenker, F., Sommer, F.T., Strey, A.: Neural Associative Memory. In: Associative Processing and Processors (A. Krikulis, C.C. Weems, eds.). IEEE Computer Society, Los Alamitos, CA, USA, 1997
89. El Gayar, N., Schwenker, F., Ismail, M.A., Palm, G.: Fuzzy Neural Network Models for High-Dimensional Data Clustering. In: Proceedings Second International ICSC Symposium on Fuzzy Logic and Applications (ISFB'97), Zürich, 02/97. 203-209, ICSC Academic Press, 1997
90. He, J., Liu, L., Palm, G.: A New Codebook Training Algorithm for VQ-Based Speaker Recognition. In: Proceedings IEEE ICASSP'97, Vol. 2, 1091-1094. München, 1997
91. He, J., Liu, L., Palm, G.: A Discriminative Training Algorithm for Gaussian Mixture Speaker Models. In: Proceedings EUROSPEECH'97, Vol. 2, 959-962, Rhodos, Griechenland, 1997

92. Kestler, H., Schwenker, F., Palm, G., Hombach, V., Höher, M.: Neuronale Netze zur Visualisierung und Klassifikation - Anwendung auf hochverstärkte EKG Signale. In: Medizinische Informatik. Biometrie und Epidemiologie - GMDS 97 (R. Muche, G. Büchele, D. Harder, W. Gaus, eds.), 90-95, 1997
93. Kestler, H., Strey, H., Dickhaus, H. Palm, G., Hombach, V., Höher, M.: Diskrete Waveletanalyse des signalgemittelten, hochauflösenden Elektrokardiogramms. In: Medizinische Informatik, Biometrie und Epidemiologie - GMDS 97 (R. Muche, G. Büchele, D. Harder, W. Gaus, eds.), 96-101, 1997
94. Kestler, H., Strey, H., Dickhaus, H., Palm, G., Hombach, V., Höher, M.: Discrete Wavelet Analysis of the Signal-Averaged High-Resolution Electrocardiogram. In: Computers in Cardiology (A. Murray, S. Swiryn, eds.), 621-624, IEEE Computer Society, 1997
95. Krone, G., Talle, B., Wichert, A., Palm, G.: Neural Architectures for Sensorfusion in Speechrecognition. In: Proceedings of the AVSP'97 Workshop, Rhodes (Greece), 1997
96. Liu, L., He, J., Palm, G.: A Comparison of Human and Machine in Speaker Recognition. In: Proceedings EUROSPEECH'97, Vol. 5, 2327-2330, Rhodos, Griechenland, 1997
97. Liu, L., He, J., Palm, G.: Effects of Phase on the Perception of Intervocalic Stop Consonants. In: Speech Communication, 1997
98. Simon, S., Schwenker, F., Palm, G.: A Hierarchical Neural Network Model for Pattern Recognition. In: Classification and Knowledge Organization (Opitz, O., Klar, R., eds.). 136-142, Springer, Berlin, 1997
99. Talle, B., Krone, G., Palm, G.: Comparison of Neural Architectures for Sensorfusion. In: Proceedings of the IEEE International Conference on Acoustic, Speech and Signal Processing, ICASSP'97, vol. 4, 3273-3276, München, 1997
100. Wennekers, Th., Palm, G.: On the Relation Between Neural Modelling and Experimental Neurosciences. Theory Bioscienc. 116, 267-283, Gustav Fischer, 1997
101. Enderle, S., Kraetzschmar, G., Palm, G.: Neural Networks for Mapping Sonar Data to Egocentric Maps for Mobile Robots. In: Proceedings 3. Workshop Neuronale Netze in der Anwendung", 75-82, Magdeburg, 1998
102. Hüning, H., Glünder, H., Palm, G.: Synaptic Delay Learning in Pulse-Coupled Neurons. Neural Computation 10, 555-565, 1998
103. Kestler, H., Palm, G., Hombach, V., Höher, M.: Intra QRS Variability of High Resolution Beat-to-Beat Recordings Classified by Neural Networks. A.N.E., Vol. 3, No. 3, Part 2, S. 57, 1998
104. Kestler, H., Haschka, M., Kratz, W., Schwenker, F., Palm, G. Hombach, V., Höher, M.: De-Noising of High-Resolution ECG Signals by Combining the Discrete Wavelet

Transform with the Wiener Filter. In: Proceedings IEEE Computers in Cardiology, 233-236, 1998

105. Kraetzschmar, G., Sablatnög, S., Enderle, S., Palm, G.: Using Neurosymbolic Integration in Modelling Robot Environments: A Preliminary Report. In: Working Notes of NIPS-08 Workshop on Hybrid Neural Symbolic Processing (Wertmer, S., Sun, R., eds.). Denver, Colorado, 1998
106. Schwenker, F., Kestler, H., Palm, G.: Adaptive Clustering and Multidimensional Scaling of Large and Highdimensional Data Sets. In: Proceedings of the ICANN'98 (Niklasson, L., Boden, M., Ziemke, T., eds.). 911-916, Springer, 1998
107. Schwenker, F., Simon, S., Palm, G.: Ein hierarchischer neuronaler Klassifikator für die Erkennung von Einzelzeichen in mathematischen Formeltexten. In: Proceedings: Mustererkennung 1998 (Levi, P., Ahler, R.-J., May, F., Schanz, M., eds.), 410-417, Springer 1998
108. Schwenker, F., Kestler, H., Palm, G.: Cluster Analysis of Signal Averaged High Resolution Electrocardiograms. Annals of Noninvasive Electrocardiology, Vol. 3, No. 3, Part 2, p. 57, 1998
109. Sommer, F.T., Palm, G.: Bidirectional Retrieval from Associative Memory. In: Advances in Neural Information Processing Systems 10 (NIPS'97), 675-681. MIT, Cambridge, MA, 1998
110. Sommer, F.T., Wennekers, Th., Palm, G.: Bidirectional Completion of Cell Assemblies in the Cortex. In: Computational Neuroscience: Trends in Research 1998 (CNS'97). Plenum, New York, 1998
111. Baune, A., Sommer, F., Erb, M., Wildgruber, D., Kardatzki, B., Palm, G., Grodd, W.: Dynamical Cluster Analysis of Cortical fMRI Activation. NeuroImage 9, 477-489, 1999
112. Baune, A., Simon, S., Kestler, H.A., Schwenker, F., Palm, G.: Schritthalrende Objektklassifikation für einen autonomen mobilen Roboter. In: Autonome Mobile Systeme (G. Schmidt, U. Hanebeck, F. Freiberger, eds.), 254-261, Springer, Berlin, 1999
113. Enderle, S., Kraetzschmar, G., Sablatnög, S., Palm, G.: Sonar Interpretation Learned by Laser Data. In: Proceedings of the Third European Workshop on Advanced Mobile Robots (EUROBOT'99), Zürich, Schweiz, 1999
114. Enderle, S., Kraetzschmar, G., Sablatnög, S., Palm, G.: A Sensor Learning from Another. In: Proceedings of the International Conference on Artificial Neural Networks (ICANN'99), Edinburgh, Scotland, 1999
115. Enderle, S., , Sablatnög, S., Kraetzschmar, G., Palm, G.: A Sensor Learning from Another. In: Proceedings of the Fourth International Workshop "Neural Networks in Applications, Magdeburg, 1999

116. He, J., Liu, L., Palm, G.: A Discriminative Training Algorithm for VQ-Based Speaker Identification. *IEEE Transactions on Speech and Audio Processing*, Vol. 7, No. 3, 353-356, 1999
117. Kestler, H.A., Schwenker, F., Hafner, G., Hombach, V., Palm, G., Höher, M.: Feasibility study of complete neural net based classification of signal-averaged high-resolution ECGs. *Computers in Cardiology* 26, 575-578, 1999
118. Kestler, H.A., Simon, S., Baune, A., Schwenker, F., Palm, G.: Object classification using simple, colour based visual attention and a hierarchical neural network for neuro-symbolic integration. In: *KI'99: Advances in Artificial Intelligence* (W. Burgard, T. Christaller, A.B. Cremers, eds.), 267-279, Springer, Berlin, 1999
119. Kestler, H.A., Simon, S., Baune, A., Hagenbuchner, M., Schwenker, F., Palm, G.: Hierarchical neural object classifier for subsymbolic-symbolic coupling. In: *Mustererkennung 1999* (W. Förster, J.M. Buhmann, A. Faber, P. Faber, eds.) 27-35, Springer, Berlin 1999
120. Kraetzschmar, G., Enderle, S., Sablatnög, S., Boß, Th., Ritter, M., Braxmayer, H., Folkerts, H., Mayer, G., Müller, M., Seidl, H., Klingler, M., Dettinger, M., Wörz, R., Palm, G.: The Ulm Sparrows: Research into Sensorimotor Integration, Agency, Learning, and Multiagent Cooperation. In: *RoboCup-98* (M. Asada, ed.), vol. 1604, Lecture Notes in Artificial Intelligence. Springer, 1999
121. Sablatnög, S., Kraetzschmar, G., Enderle, S., Palm, G.: The Wall Histogram Method. In: *Proceedings of the International Conference on Artificial Neural Networks (ICANN'99)*, Edinburgh, Scotland, 1999
122. Simon, S., Kestler, H.A., Baune, A., Schwenker, F., Palm, G.: Object classification with simple visual attention and a hierarchical neural network for subsymbolic-symbolic coupling. In: *Proceedings of the IEEE International Symposium on Computational Intelligence in Robotics and Automation, CIRA'99*, 244-249, 1999
123. Sommer, F.T., Palm, G.: Improved Bidirectional Retrieval of Sparse Patterns Stored by Hebbian Learning. *Neural Networks* 12(2), 281-297, 1999
124. Wennekers, Th., Palm, G.: How Imprecise is Neuronal Synchronization? *Neurocomputing* 26-27, 579-585, 1999
125. Enderle, S., Ritter, M., Fox, D., Sablatnög, S., Kraetzschmar, G., Palm, G.: Soccer-Robot Localization Using Sporadic Visual Features. In: *Intelligent Autonomous Systems 6 (IAS-6)* (E. Pagello, F. Groen, T. Arai, R. Dillman, A. Stentz, eds.), 959-966. IOS Press, Amsterdam, 2000
126. Enderle, S., Ritter, M., Fox, D., Sablatnög, S., Kraetzschmar, G., Palm, G.: Vision-Based Localization in RoboCup Environments. In: *Proceedings of First European RoboCup Workshop* (G. Adorni, W. van der Hoek, eds.). Published on CD-ROM, Amsterdam, Netherlands, 2000

127. Kestler, H.A., Haschka, M., Müller, A., Schwenker, F., Palm, G., Höher: Evolutionary Optimization of a Wavelet Classifier for the Categorization of Beat-to-Beat Variability Signals. *Computers in Cardiology*, 27, 715-718, 2000
128. Kestler, H.A., Palm, G.: A Simple Evolutionary Wavelet Classifier for the Categorization of Beat-to-Beat Variability Signals. *Biomedizinische Technik*, Band 45, Ergänzungsband 2, 30-35, 2000
129. Kestler, H.A., Sablatnög, S., Simon, S., Enderle, S., Baune, A., Kraetzschmar, G., Schwenker, F., Palm, G.: Concurrent Object Identification and Localization for a Mobile Robot. *Künstliche Intelligenz*, 4, 23-29, 2000
130. Kestler, H.A., Schwenker, F., Palm, G., Wöhrle, J., Höher, M.: Neural Classification in High-Resolution ECG Signal Processing. In: *Advances in Noninvasive Electrocardiographic Monitoring Techniques* (H.-H. Osterhues et al., eds.). 441-452, Kluwer, Netherlands, 2000
131. Kraetzschmar, G., Sablatnög, S., Enderle, H., Utz, H., Simon, S., Palm, G.: Integration of Multiple Representation and Navigation Concepts on Mobile Robots. In: *Workshop SOAVE-2000: Selbstorganisation von adaptivem Verhalten* (H.-M. Groß, K. Debes, H.-J. Böhme, eds.). *Fortschrittsberichte VDI*, 10: Informatik/ Kommunikationstechnik, 643, VDI-Verlag, 2000
132. Kraetzschmar, G., Sablatnög, S., Enderle, S., Palm, G.: Application of Neurosymbolic Integration for Environment Modelling in Mobile Robots. In: *Hybrid Neural Systems* (S. Wermter, R. Sun, eds.). LNAI 1778, Springer, Berlin, 2000
133. Sablatnög, S., Enderle, S., Dettinger, M., Boß, Th., Livani, M., Dietz, M., Giebel, J., Meis, U., Folkerts, H., Neubeck, A., Schaeffer, P., Ritter, M., Braxmeier, H., Maschke, D., Kraetzschmar, G., Kaiser, J., Palm, G.: The Ulm Sparrows 99. In: *RoboCup-99: Robot Soccer World Cup III*. Lecture Notes in Computer Science, Springer, Berlin, 2000
134. Schwenker, F., Kestler, H.A., Palm, G.: Radial-Basis-Function Networks: Learning and Applications. In: *Fourth International Conference on Knowledge-Based Intelligent Engineering Systems and Allied Technologies* (R. Howlett, L. Jain, eds.), 33-43. IEEE, Piscataway, 2000
135. Schwenker, F., Kestler, H.A., Palm, G.: Combination of Supervised and Unsupervised Learning for Radial-Basis-Function Networks. In: *Second International ICSC Symposium on Neural Computation (NC'2000)* (H.H. Bothe, R. Rojas, eds.), 22-28. ICSC Academic press, Wetaskiwin, Canada, 2000
136. Simon, S., Vogt, F., Kestler, H.A., Schwenker, F., Palm, G.: Aufmerksamkeitssteuerung für die Objektklassifikation auf einem autonomen mobilen Roboter. In: *Dynamische Perzeption* (G. Baratoff, H. Neumann, eds.), 195-198. Akademische Verlagsgesellschaft, Berlin, 2000

137. Dietrich, C., Schwenker, F., Palm, G.: Classification of Time Series Utilizing Temporal and Decision Fusion. In: Proceedings of the Second Workshop on Multiple Classifier Systems - MCS 2001 (Kittler, J.), 378-387, LNCS 2096, Springer, 2001
138. Dietrich, C., Schwenker, F., Palm, G.: Fusion Architectures for the Classification of Time Series. In: Proceedings of the International Conference on Artificial Neural Networks – ICANN 2001, 749-755, LNCS 2130, Springer, Wien, 2001
139. Enderle, S., Folkerts, H., Ritter, M., Sablatnög, S., Kraetzschmar, G., Palm, G.: Vision-Based Robot Localization Using Sporadic Features. In: Proceedings of the Workshop "Robot Vision", Auckland, New Zealand, 2001
140. Enderle, S., Ritter, M., Fox, D., Sablatnög, S., Kraetzschmar, G., Palm, G.: Vision-Based Localization in RoboCup Environments. In: RoboCup-2000: Robot Soccer World Championship IV (P. Stone, T. Balch, G. Kraetzschmar, eds.). Lecture Notes in Artificial Intelligence 2019, Springer, Berlin, Heidelberg, 2001
141. Enderle, S., Utz, H., Sablatnög, S., Simon, S., Kraetzschmar, G., Palm, G.: Miró: Middleware for Autonomous Robots. In: Proceedings 1st IFAC conference on Telematics Applications in Automation and Robotics 2001, Weingarten, 2001
142. Grebe, O., Höher, M., Schwenker, F., Neumann, H., Wöhrle, J., Palm, G., Hombach, V., Kestler, H.A.: New Markers for Diastolic Function by Cardiac Magnetic Resonance Imaging. Computers in Cardiology, 28, 625-628, 2001
143. Kestler, H.A., Höher, M., Palm, G.: Evolutionary Optimization of a Wavelet Classifier for the Categorization of Beat-to-Beat Variability Signals. In: Artificial Neural Nets and Genetic Algorithms (V. Kurkova, N.C. Steele, R. Neruda, M. Karny (eds.). Proceedings of ICANNGA 2001. 280-283, Springer-Verlag, Wien, 2001
144. Kestler, H.A., Palm, G.: A simple evolutionary wavelet classifier for the categorization of beat-to-beat variability signals. Biomedizinische Technik, 45(suppl. 2), 30-36, 2001
145. Kestler, H.A., Schwenker, F., Wöhrle, J., Hombach, V., Palm, G., Höher, M.: Combined Assessment of Beat-to-Beat Micro-Variability and Signal-Averaged ECG Parameters. Computers in Cardiology, 28, 73-76, 2001
146. Knoblauch, A., Palm, G.: Spiking Associative Memory and Scene Segmentation by Synchronization of Cortical Activity. In: Emerging Neural Architectures Based on Neuroscience (S. Wermter, J. Austin, D. Willshaw, eds.), LNAI 2036, 407-427, Springer, Berlin, Heidelberg, 2001
147. Knoblauch, A., Palm, G.: Pattern Separation and Synchronization in Spiking Associative Memories and Visual Areas. Neural Networks, 14, 763-780, 2001
148. Schwenker, F., Kestler, H.A., Palm, G.: Three Learning Phases for Radial-Basis-Function Networks. Neural Networks 14(4-5), 439-458, 2001

149. Schwenker, F., Kestler, H.A., Simon, S., Palm, G.: 3D Object Recognition for Autonomous Mobile Robots Utilizing Support Vector Classifiers. In: Proceedings of the 2001 IEEE International Symposium on Computational Intelligence in Robotics and Automation, CIRA 2001, 344-349, IEEE, 2001
150. Schwenker, F., Palm, G.: Tree-Structured Support Vector Machines for Multi-Class Pattern Recognition. In: Multiple Classifier Systems (Kittler, J., Roli, F., eds.), 409-417, Springer, 2001
151. Dietrich, C., Schwenker, F., Palm, G.: Decision Templates for the Classification of Bioacoustic Time Series. In: Proceedings of the IEEE International Conference on Neural Networks and Signal Processing, 159-168, 2002
152. Kestler, H., Müller, A., Hombach, V., Wöhrle, J., Palm, G., Höher, M., Schwenker, F.: Decision Fusion of Micro-Variability and Signal Averaged ECG Parameters from the QRS Complex with RBF Networks. In: Proceedings of the IEEE International Conference on Computers in Cardiology, 297-300, 2002
153. Knoblauch, A., Palm, G.: Scene Segmentation by Spike Synchronization in Reciprocally Connected Visual Areas. I. Local Effects of Cortical Feedback. *Biological Cybernetics*, 87, 151-167, 2002
154. Knoblauch, A., Palm, G.: Scene Segmentation by Spike Synchronization in Reciprocally Connected Visual Areas. II. Global Assemblies and Synchronization on a Larger Space and Time Scales. *Biological Cybernetics*, 87, 168-184, 2002
155. Kraetzschmar, G., Utz, H., Sablatnög, S., Enderle, S., Palm, G.: Miro – Middleware for Cooperative Robotics. In: Proceedings of RoboCup-2001 Symposium (Birk, A., Coradeschi, S., Tadokoro, S., eds.), LNAI 2377, 411-416, Springer, 2002
156. Schwenker, F., Kestler, H.A., Palm, G.: Algorithms for the Visualization of Large and Multivariate Data Sets. In: Selforganizing Neural Networks: Recent Advances and Applications (Seiffert, U., Jain, L.C., eds.), 165-183, Springer, 2002
157. Schwenker, F., Kestler, H.A., Palm, G.: Unsupervised and Supervised Learning in Radial-Basis-Function Networks. In: Selforganizing Neural Networks: Recent Advances and Applications (Seiffert, U., Jain, L.C., eds.), 217-243. Springer, 2002
158. Simon, S., Schwenker, F., Kestler, H.A., Kraetzschmar, G., Palm, G.: Hierarchical Object Classification for Autonomous Mobile Robots. In: Proceedings of the International Conference on Artificial Neural Networks, ICANN 2002, 831-836, Springer, 2002
159. Utz, H., Mayer, G., Maschke, D., Neubeck, A., Schaeffer, P., Baer, P., Baetge, I., Fischer, J., Holzer, R., Lauer, M., Reisser, A., Sterk, F., Palm, G., Kraetzschmar, G.: The Ulm Sparrows 2001, In: Proceedings of RoboCup-2001 Symposium (Birk, A., Coradeschi, S., Tadokoro, S., eds.), LNAI 2377, 677-680, Springer, 2002

160. Dietrich, Ch., Palm, G., Schwenker, F.: Decision Templates for the Classification of Bioacoustic Time Series. *Information Fusion*, 4, 101-109, 2003
161. Dietrich, C., Schwenker, F., Palm, G.: Multiple Classifier Systems for the Recognition of Orthoptera Songs. In: *Proceedings of the 25th Pattern Recognition Symposium* (Michaelis, B., ed.), 274-281, 2003
162. Dietrich, C., Schwenker, F., Palm, G.: Classification of Bioacoustic Time Series by Training a Fusion Layer with Decision Templates. In: *Artificial Neural Networks in Pattern Recognition* (Gori M., Marini, S., eds.), 15-18, 2003
163. Knoblauch, A., Palm, G.: Synchronization of Neuronal Assemblies in Reciprocally Connected Cortical Areas. *Theory Biosci.*, 122, 37-54, 2003
164. Knoblauch, A., Palm, G.: Attentional Effects in a Model of Two Reciprocally Connected Visual Areas. In: *The Logic of Cognitive Systems. Proceedings of the Fifth International Conference on Cognitive Modeling - ICCM-2003* (Detje, F., Dörner, D., Schaub, H., eds.), 271-272, Universitätsverlag Bamberg, 2003
165. Schwenker, F., Dietrich, C., Kestler, H., Riede, K., Palm, G.: Radial Basis Function Neural Networks and Temporal Fusion for the Classification of Bioacoustic Time Series. Special Issue on Neural Pattern Recognition, *Neurocomputing*, 51, 265-275, 2003
166. Borst, M., Knoblauch, A., Palm, G.: Modelling the Auditory System: Preprocessing and Associative Memories Using Spiking Neurons. *Neurocomputing*, 58-60, 1012-1018, 2004
167. Borst, M., Langner, G., Palm, G.: A Biologically Motivated Neural Network for Phase Extraction from Complex Sounds. *Biological Cybernetics*, 90, 98-104, 2004
168. Dietrich, C., Palm, G., Riede, K., Schwenker, F.: Classification of Bioacoustic Time Series Based on the Combination of Global and Local Decisions. *Pattern Recognition*, 37(12), 2293-2305, 2004
169. Fay, R., Kaufmann, U., Schwenker, F., Palm, G.: Learning Object Recognition in a NeuroBotic System. In: *3rd Workshop on Selforganization of Adaptive Behavior, SOAVE 2004* (H.-M. Groß, K. Debes, H.-J. Böhme, eds.). *Fortschritt-Berichte VDI*, Reihe 10 Informatik/Kommunikation, 743, 198-209, VDI Verlag, Düsseldorf, 2004
170. Fay, R., Kaufmann, U., Knoblauch, H., Markert, H., Palm, G.: Integrating Object Recognition, Visual Attention, Language and Action Processing on a Robot in a Neurobiologically Plausible Associative Architectur. In: *Proceedings of the NeuroBotics-Workshop, 27th German Conference on Artificial Intelligence (KI-2004)*, 2004
171. Kaufmann, U., Mayer, G., Kraetzschmar, G., Palm, G.: Visual Robot Detection in RoboCup Using Neural Networks. *Proceedings of the Robocup 2004 International Symposium*, Lisbon, Portugal, LNAI 3276, 262-273, Springer, 2004

172. Knoblauch, A., Palm, G.: What is Signal and What is Noise in the Brain? *BioSystems*, 79(1-3), 83-90, 2004
173. Knoblauch, A., Fay, R., Kaufmann, U., Markert, H., Palm, G.: Associating Words to Visually Recognized Objects. In: *Anchoring Symbols to Sensor Data. Papers from the AAAI Workshop* (Coradeschi, S., Saffiotti, A., eds.), 10-16, AAAI Press, Menlo Park, CA, 2004
174. Schwenker, F., Dietrich, C., Palm, G.: Classification of Bioacoustic Time Series by Training a Decision Template Fusion Mapping. In: *Proceedings of the European Symposium on Artificial Neural Networks* (M. Verleysen, ed.), 555-560, 2004
175. Fay, R., Kaufmann, U., Knoblauch, A., Markert, H., Palm, G.: Combining visual attention, object recognition and associative information processing in a NeuroBotic system. In: *Biomimetic Neural Learning for Intelligent Robots* (Wermter, S., Palm, G., Elshaw, M., eds.). LNAI 3575, 118-143, Springer, Berlin, Heidelberg, 2005
176. Fay, R., Kaufmann, U., Markert, H., Palm, G.: Adaptive Visual Attention Based Object Recognition. In: *Proceedings of the 4th IEEE SMC UK-RI Chapter Conference on Applied Cybernetics (AC 2005)*, London, UK, 2005
177. Fay, R., Schwenker, F., Palm, G.: Incremental Learning in Hierarchical Neural Networks for Object Recognition. In: *Proceedings 2nd International Conference on Informatics in Control, Automation and Robotics (ICINCO 2005)*, 298-303, 2005
178. Kahsay, L., Schwenker, F., Palm, G.: Comparison of Multiclass SVM Decomposition Schemes for Visual Object Recognition. In: *Proceedings of the DAGM 2005* (Kropatsch, W., Sablatnig, R., Hanbury, A., eds.), LNCS 3663, 334-341, Springer, Berlin, Heidelberg, 2005
179. Kestler, H.A., Schuler, R., Müller, A., Buchholz, M., Schwenker, F., Palm, G., Gress, T.M.: Bioinformatic methods for microarray dataanalysis in pancreatic cancer. In: *Exocrine pancreas cancer* (Gress, T.M., Neoptolemos, J., Lemoine, N.R., Real, F.X. (eds.)), 228-241, Solvay Pharmaceuticals, 2005
180. Knoblauch, A., Markert, H., Palm, G.: An Associative Model of Cortical Language and Action Understanding. In: *Modeling Language, Cognition and Action* (Cangelosi, A., Bugmann, G., Borisyuk, R., eds.), *Proceedings of the Ninanth Neural Computation and Psychology Workshop*, Plymouth 2004. 79-83, World Scientific, 2005
181. Knoblauch, A., Markert, H., Palm, G.: An associative cortical model of language understanding and action planning. In: *Artificial Intelligence and Knowledge Engineering Applications: A Bioinspired Approach* (Mira, J., Alvarez, J.R., eds.), *Proceedings of IWINAC 2005* LNCS 3562, 405-414, Springer, Berlin, Heidelberg, 2005
182. Markert, H., Knoblauch, A., Palm, G.: Detecting sequences and understanding language with neural associative memories and cell assemblies. In: *Biomimetic Neural Learning*

for Intelligent Robots (Wermter, S., Palm, G., Elshaw, M., eds.). LNAI 3575, 107-117, Springer, Berlin, Heidelberg, 2005

183. Markert, H., Knoblauch, A., Palm, G.: Associative Language Processing in Cortical Areas. In: Proceedings of the 4th IEEE SMC UK-RI Chapter Conference on Applied Cybernetics (AC 2005), 2005
184. Mayer, G., Kaufmann, U., Kraetzschmar, G., Palm, G.: Neural Robot Detection in RoboCup. In: Biomimetic Neural Learning for Intelligent Robots (Wermter, S., Palm, G., Elshaw, M., eds.). LNAI 3575, 349-361, Springer, Berlin, Heidelberg, 2005
185. Mayer, G., Utz, H., Palm, G.: Information Integration in a Multi-Stage Object Classifier. In: Proceedings 19. Fachgespräch Autonome Mobile Systeme (AMS), Springer, Stuttgart, 2005
186. Mayer, G., Melchert, J., Utz, H., Kraetzschmar, G., Palm, G.: Neural Object Classification and Tracking. In: Proceedings of the 4th IEEE SMC UK-RI Chapter Conference on Applied Cybernetics (AC 2005), 2005
187. Schwenker, F., Dietrich, C., Riede, K., Palm, G.: Künstliche neuronale Netze für die Erkennung von Orthopterengesängen. Bioakustische Mustererkennung, 21-32, 2005
188. Thiel, Ch., Schwenker, F., Palm, G.: Using Dempster-Shafer Theory in MCF Systems to Reject Samples. In: Proceedings of the 6th International Workshop on Multiple Classifier Systems (MCS 2005) (Oza, N.C. et al., eds.), LNCS 3541, 118-127, Springer, Berlin, Heidelberg, 2005
189. Utz, H., Kraetzschmar, G., Mayer, G., Palm, G.: Hierarchical Behavior Organization. In: Proceedings of the 2005 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2598-2605, 2005
190. El Gayar, N., Schwenker, F., Palm, G.: A Study of the Robustness of KNN Classifiers trained using Soft Labels. In: International Workshop on Artificial Neural Networks in Pattern Recognition (ANNPR 2006), (F. Schwenker, S. Marinai, eds.), LNAI 4087, 67-80, Springer, 2006
191. Fay, R., Schwenker, F., Palm, G.: Evidence Based Reasoning in Classifier Hierarchies. In: Proc. ECAI International Workshop on Neural-Symbolic Learning and Reasoning (NeSy 2006), 2006
192. Fay, R., Schwenker, F., Thiel, Ch., Palm, G.: Hierarchical Neural Networks Utilising Dempster-Shafer Evidence Theory. In: Proc. Int. Workshop on Artificial Neural Networks in Pattern Recognition (ANNPR 2006), (F. Schwenker, S. Marinai, eds.), LNAI 4087, 198-209, Springer, 2006
193. Kallenbach, I., Schweiger, R., Palm, G., Löhlein, O.: Multi-class Object Detection in Vision Systems Using a Hierarchy of Cascaded Classifiers. In: Proc. Intelligent Vehicles Symposium 2006, 10-2, 2006

194. Kestler, H.A., Kraus, J.M., Palm, G., Schwenker, F.: On the effects of constraints in semi-supervised hierarchical clustering. In: International Workshop on Artificial Neural Networks in Pattern Recognition (ANNPR 2006), (F. Schwenker, S. Marinai, eds.), LNAI 4087, 57-66, Springer, 2006
195. Kestler, H.A., Müller, A., Buchholz, M., Gress, T.M., Palm, G.: A perceptually optimized scheme for visualizing gene expression ratios with confidence values. In: PIT 2006 (E. André et al., eds.), LNAI 4021, 73-84, Springer, 2006
196. Markert, H., Palm, G.: An Approach to Language Understanding and Contextual Disambiguation in Human-Robot Interaction. In: Proc. ECAI International Workshop on Neural-Symbolic Learning and Reasoning (NeSy 2006), 23-35, 2006
197. Schwenker, F., Dietrich, C., Thiel, C., Palm, G.: Learning Decision Fusion Mappings for Pattern Recognition. In: Proc. 4th International Conference INFOS 2006, 2006
198. Schwenker, F., Dietrich, C. Thiel, Ch., Palm, G.: Learning of decision fusion mappings for pattern recognition. International Journal on Artificial Intelligence and Machine Learning (AIML), vol. 6, 17-21, 2006
199. Schwenker, F., Sachs, A., Palm, G., Kestler, H.A.: Orientation Histograms for Face Recognition. In: International Workshop on Artificial Neural Networks in Pattern Recognition (ANNPR 2006), (F. Schwenker, S. Marinai, eds.), LNAI 4087, 253-259, Springer, 2006
200. Strauß, P.-M., Hoffmann, H., Neumann, H., Minker, W., Palm, G., Scherer, S., Schwenker, F., Traue, H., Weidenbacher, U.: Wizard-of Oz Data Collection for Perception and Interaction in Multi-User Environments. In: Proceedings Int. Conference on Language Resources and Evaluation (LREC), 2014-2017, 2006
201. Kara-Kayikci, Z., Markert, H., Palm, G.: Neural Associative Memories and Hidden Markov Models for Speech Recognition. In: Proceedings IJCNN Conference, 2007
202. Maganti, H.K., Scherer, S., Palm, G.: A novel feature for emotion recognition in voice based applications. In: Proc. Affective Computing and Intelligent Interaction (ACII), 713-714, 2007
203. Markert, H., Knoblauch, A., Palm, G.: Modelling of syntactical processing in the cortex. BioSystems 89, 300-315, 2007
204. Oubbatı, M., Palm, G.: Neural Fields for Controlling Formation of Multiple Robots. In: Proc. IEEE Int. Symposium on Computational Intelligence in Robotics and Automation (CIRA 2007), 90-94, 2007
205. Oubbatı, M., Palm, G.: Neural Fields for Real-Time Navigation of an Omnidirectional Robot. In: Proc. European Conference on Mobile Robots (ECMR 2007), 2007
206. Scherer, S., Schwenker, F., Palm, G.: Classifier fusion for emotion recognition from speech. In: Proc. Intelligent Environments, 152-155, 2007

207. Wennekers, Th., Palm, G.: Modelling Generic Cognitive Functions with Operational Hebbian Cell Assemblies. In: Neural Network Research Horizons (M.L. Weiss, ed.), Nova Science Publ., 225-294, 2007
208. Abdel Hady, M.F., Schwenker, F., Palm, G.: Multi-View Forests Based on Dempster-Shafer Evidence Theory: A New Classifier Ensemble Method. In: Proc. 5th IASTED Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2008), 18-23, 2008
209. Abdel Hady, M.F., Palm, G., Schwenker, F.: Multi-View Forests of Radial Basis Function Networks Based on Dempster-Shafer Evidence Theory. In: Proc. 16th European Symposium on Artificial Neural Networks (ESANN 2008), 307-312, 2008
210. Abdel Hady, M.F., Schwenker, F., Palm, G.: Semi-supervised Learning of Tree-Structured RBF Networks Using Co-training. In: ICANN 2008, Part I (V. Kurkova et al., eds.), LNCS 5163, 79-88, Springer, Berlin, Heidelberg, 2008
211. Kara-Kayikci, Z., Palm, G.: Word Recognition and Learning based on Associative Memories and Hidden Markov Models. International Journal of Intelligent Technology, vol. 3, no. 1, 19-23, 2008
212. Kara-Kayikci, Z., Palm, G.: Word recognition and incremental learning based on neural associative memories and hidden Markov models. In: Proc. 16th European Symposium on Artificial Neural Networks, 119-124, 2008
213. Kara-Kayikci, Z., Palm, G.: Large vocabulary continuous speech recognition using associative memory and hidden Markov model. In: Proc. 8th Conf. on Signal, Speech and Image Processing (SSIP'08), 61-66, WSEAS, 2008
214. Kaufmann, U., Palm, G.: Visual Top-Down Attention Framework for Robots in Dynamic Environments. In: Proceedings European Robotics Symposium, vol. 44/2008, 323-332, 2008
215. Lausser, L., Palm, G., Schwenker, F.: Detecting Zebra Crossings Utilizing AdaBoost. In: Proceedings 16th European Symposium on Artificial Neural Networks, 535-540, 2008
216. Markert, H., Kayikci, Z.K., Palm, G.: Sentence Understanding and Learning of New Words with Large-Scale Neural Networks. In: Proc. Artificial Neural Networks in Pattern Recognition (ANNPR 2008), (L. Prevost, S. Marinai, F. Schwenker, eds.), LNAI 5064, 217-227, Springer, Berlin, Heidelberg, 2008
217. Oubbati, M., Palm, G.: Neural Dynamics for Robot Control. In: Proc. 17th Int. Workshop on Robotics in Alpe-Adria-Danube Region (RAAD 2008), 2008
218. Scherer, S., Schwenker, F., Palm, G.; Emotion recognition from speech using multi classifier systems and RBF ensembles. In: Speech, Audio, Image and Biomedical Signal Processing using Neural Networks, Studies in Computational Intelligence (B. Prasad, S.R.M. Prasanna, eds.), Vol. 83, 49-70, Springer, 2008

219. Scherer, S., Oubbati, M., Schwenker, F., Palm, G.: Real-time emotion recognition from speech using echo state networks. In: Proc. Artificial Neural Networks in Pattern Recognition (ANNPR 2008) (L. Prevost, S. Marinai, F. Schwenker, eds.), LNAI 5064, 205-216, Springer, 2008
220. Scherer, S., Oubbati, M., Schwenker, F., Palm, G.: Real-time emotion recognition using echo state networks. In: Proc. IEEE Tutorial and Research Workshop on Perception and Interactive Technologies (PIT 2008), LNAI 5078, 200-204, Springer, Berlin, Heidelberg, 2008
221. Scherer, S., Hofmann, H., Lampmann, M., Pfeil, M., Rhinow, S., Schwenker, F., Palm, G.; Emotion Recognition from Speech: Stress Experiment. In: Proc. Int. Conference on Language Resources and Evaluation, 2008
222. Strauß, P.-M., Hoffmann, H., Neumann, H., Minker, W., Palm, G., Scherer, S., Traue, H., Weidenbacher, U.: The PIT corpus of German multi-party dialogues. In: Proc. International Conference on Language Resources and Evaluation (LREC), 2008
223. Abdel Hady, M., Schwenker, F., Palm, G.: Semi-supervised Learning for Regression with Co-training by Committee. In: Artificial Neural Networks - ICANN 2009, Part I (C. Alippi, M. Polycarpou, Ch. Panayiotou, G. Ellinas, eds.). LNCS 5768, 121-130, Springer, Berlin, Heidelberg, 2009
224. Hauser, F., Bouchain, D., Palm, G.: Coexistence of Cell Assemblies and STDP. In: Artificial Neural Networks - ICANN 2009, Part I (C. Alippi, M. Polycarpou, Ch. Panayiotou, G. Ellinas, eds.). LNCS 5768, 191-197, Springer, Berlin, Heidelberg, 2009
225. Kraus, J.M., Palm, G., Schwenker, F., Kestler, H.A.: Semi-Supervised Clustering in Functional Genomics. In: Mathematical Analysis of Evolution, Information and Complexity (W. Arendt, W.P. Schleich, eds.), 243-271, Wiley-VCH, Weinheim, 2009
226. Markert, H., Kaufmann, U., Kara Kayikci, Z., Palm, G.: Neural associative memories for the integration of language, vision and action in an autonomous agent. *Neural Networks*, 22, 134-143, 2009
227. Oubbati, M., Holoch, W., Palm, G.: Neural Fields for complex Behavior Generation on Autonomous Robots. In: Proc. of Int. Joint Conference on Neural Networks (IJCNN), IEEE Catalog: 07CH37922, 9-14, 2009
228. Schels, M., Thiel, Ch., Schwenker, F., Palm, G.: Classifier Fusion Applied to Facial Expression Recognition: An Experimental Comparison. In: Human Centered Robot Systems. Cognition, Interaction, Technology (H. Ritter, G. Sagerer, R. Dillmann, M. Buss, eds.). COSMOS 6, 121-129, Springer, Berlin, Heidelberg, 2009
229. Scherer, S., Schwenker, F., Campbell, N., Palm, G.: Multimodal Laughter Detection in Natural Discourses. In: Human Centered Robot Systems. Cognition, Interaction, Technology (H. Ritter, G. Sagerer, R. Dillmann, M. Buss, eds.). COSMOS 6, 111-120 Springer, Berlin, Heidelberg, 2009

230. Scherer, S., Schwenker, F., Palm, G.: Approaching emotion in human computer interaction. In: Proc. of the 1st Int. Workshop on Spoken Dialog Systems (IWSDS'09), 156-168, 2009
231. Scherer, S., Schwenker, F., Palm, G.: Classifier fusion for emotion recognition from speech. In: Advanced Intelligent Environments (W. Minker et al., eds.), 95-117, Springer, 2009
232. Schwenker, F., Scherer, S., Magdi, Y.M., Palm, G.: The GMM-SVM Supervector Approach for the Recognition of the Emotional Status from Speech. In: Artificial Neural Networks - ICANN 2009, Part I (C. Alippi, M. Polycarpou, Ch. Panayiotou, G. Ellinas, eds.). LNCS 5768, 894-903, Springer, Berlin, Heidelberg, 2009
233. Szczot, M., Löhlein, O., Serfling, M., Palm, G.: Incorporating contextual information in pedestrian recognition. In: Intelligent Vehicles Symposium, 364-369, IEEE, 2009
234. Thiel, Ch., Giacco, F., Schwenker, F., Palm, G.: Comparison of neural classification algorithms applied to land cover mapping. In: New Directions in Neural Networks (B. Apolloni, S. Bassi, M. Marinaro, eds.), 18th Italian Workshop on Neural Networks (WIRN 2008), volume 193 of Frontiers in Artificial Intelligence and Applications, 254-263, IOS Press, 2009
235. Wennekers, Th., Palm, G.: Syntactic sequencing in Hebbian cell assemblies. *Cogn Neuodyn*, 3, 4, 429-441, 2009. DOI 10.1007/s11571-009-9095-z
236. Abdel Hady, M., Schwenker, F., Palm, G.: Semi-supervised learning for tree-structured ensembles of RBF networks with Co-Training. *Neural Networks* 23(4), 497-509, 2010
237. Abdel Hady, M., Schels, M., Schwenker, F., Palm, G.: Semi-supervised Facial Expressions Annotation Using Co-Training with Fast Probabilistic Tri-Class SVMs. In: ICANN 2010, Part II (I. Konstantinos et al., eds.), LNCS 6353, 70-75, Springer, Berlin, Heidelberg, 2010
238. Abdel Hady, M., Schwenker, F., Palm, G.: When Classifier Selection Meets Information Theory: A Unifying View. In: Proc. of Int. Conf. on Soft Computing and Pattern Recognition (SoCPaR 2010), 314-319, IEEE Computer Society, 2010
239. Hauser, F., Bouchain, D., Palm, G.: Simple Constraints for Zero-Lag Synchronous Oscillations under STDP. In: ICANN 2010, Part I (K. Diamantaras, W. Duch, L.S. Iliadis (eds.), LNCS 6352, Springer, Berlin, Heidelberg, 311-316, 2010
240. Klein, M., Kamp, H., Palm, G., Doya, K.: A Computational Neural Model of Goal-Directed Utterance Selection. *Neural Networks*, 23(5), 592-606, 2010
241. Knoblauch, A., Palm, G., Sommer, F.T.: Memory Capacities for Synaptic and Structural Plasticity. *Neural Computation* 22, 2, 289-341, 2010

242. Koprinkova-Hristova, P., Oubbati, M., and Palm, G.: Adaptive critic design with echo state network. In: Proc. IEEE Int. Conf. on Systems, Man, and Cybernetics (SMC), 1010–1015, 2010
243. 2) Koprinkova-Hristova, P., Palm, G., (2010). Adaptive critic design with ESN critic for bioprocess optimization, 20th International Conference on Artificial Neural Networks ICANN'2010, Thessaloniki, Greece, September 15-18, 2010, Lecture Notes in Computer Science, vol.6353, pp.438-447.
244. Oubbati, M., Palm, G.: A Neural Framework for Adaptive Robot Control. Neural Computing and Applications 19, 1, 103-114, 2010
245. Oubbati, M, Kord, B., Palm, G.: Learning robot-environment interaction using echo state networks. In: Proc. From Animals to Animats 11. Lecture Notes in Computer Science, vol. 6226/2010, 501-510, 2010
246. Palm, G.: What does it mean to do neuroscientific research on emotions and consciousness and does it allow or even need a computational perspective? In: ECAP10, VIII European Conference on Computing and Philosophy E. Mainzer, ed.). Verlag Dr. Hut, München, 181-184, 2010
247. Abdel Hady, M., Schwenker, F., Palm, G.: Multi-View Forest: A New Ensemble Method based on Dempster-Shafer Evidence Theory. Int. J. Appl. Math. Stat, 22, (Special Issue on Soft Computing), 2-19, 2011
248. Glodek, M., Tschechne, S., Layher, G., Schels, M., Brosch, T., Scherer, S., Kächele, M., Schmidt, M., Neumann, H., Palm, G., Schwenker, F.: Multiple Classifier Systems for the Classification of Audio-Visual Emotional States. In: Proc. of the 4th Int. Conf. on Affective Computing and Intelligent Interaction (ACII'11), LNCS 6975, 359-368, 2011
249. Glodek, M., Bigalke, L., Palm, G., Schwenker, F.: Recognizing Human Activities using a Layered HMM Architecture. Machine Learning Reports, 38-41, 2011
250. Gressmann, M., Löhlein, O., Palm, G.: Pedestrian localization. In: 2011 IEEE 9th Int. Symp. on Intelligent Systems and Informatics (SISY 2011), 371-376, 2011
251. Heilemann, M., Palm, G.: Automatisierte Verifikation des Designs der grafischen Benutzeroberfläche von Infotainmentsystemen mit einem Bayes'schen Netzwerk. In: Proc. Informatik 2011. Jahrestagung der Gesellschaft für Informatik. Lecture Notes in Informatics, Band P192, 2011
252. Kestler, H.A., Lausser, L., Lindner, W., Palm, G.: On the fusion of threshold classifiers for categorization and dimensionality reduction. Comput Stat 26, 321-340, 2011. DOI 10.1007/s00180-011-0243-7
253. Koprinkova-Hristova, P., Palm, G.: ESN Intrinsic Plasticity versus Reservoir Stability, 21th International Conference on Artificial Neural Networks ICANN'2011, Espoo,

Finland, June 14-17, 2011, Lecture Notes in Computer Science, vol.6791, pp.69-76, 2011
DOI: 10.1007/978-3-642-21735-7_9

254. Kraus, J.M., Müssel, Ch., Palm, G., Kestler, H.A.: Multi-objective selection for collecting cluster alternatives. *Comput Stat* 26, 341-353, 2011.
DOI 10.1007/s00180-011-0244-6
255. Oubbati, M., M. Kächele, P. Koprinkova-Hristova, and G. Palm: Anticipating rewards in continuous time and space with echo state networks and actor-critic design. In: Proc. European Symposium on Artificial Neural Networks (ESANN), 117–122, 2011
256. Oubbati, M., Frick, J., Palm, G.: A distributed behavioral model using neural fields. In: Proc. Int Conf. on Artificial Neural Networks (ICANN). Lecture Notes in Computer Science 6792, 32-39, 2011
257. Scherer, S., Schels, M., Palm, G.: How low level observations can help to reveal the user's state in HCI. In: Proc. of the 4th Int. Conf. on Affective Computing and Intelligent Interaction (ACII'11). LNCS 6975, 81-90, 2011
258. Schmidt, M., Palm, G., Schwenker, F.: Spectral graph features for the classification of graphs and graph sequences. In: Proc. Statistical Computing 2011 (H.A. Kestler, H. Binder, M. Schmid, F. Leisch, J.M. Kraus, eds.). Ulmer Informatik Berichte Nr. 2011-04. DOI 10.1007/s00180-0120381-6, 2011
259. Sergeev, N., Palm, G.: A new object recognition system. In: Proceedings of the International Conference on Computer Vision Theory and Application, 395-400, SciTePress, 2011. DOI 10.5220/0003307103950400
260. Thom, M, Schweiger,R., Palm, G.: Supervised Matrix Factorization with Sparseness Constraints and Fast Inference. In: Proc. of IJCNN 2011, 973-979, 2011
261. Thom, M., Schweiger, R., Palm, G.: Training of Sarsely Connectes MLPs. In: Proc. of DAGM 2011. LNCS 6835, 356-365, Springer, 2011
262. Tokic, M., Palm, G.: Value-difference based exploration: Adaptive exploration between epsilon-greedy and softmax. In KI 2011: Advances in Artificial Intelligence, 335-346, Springer, Berlin, Heidelberg, 2011
263. Bouchain, D.A., Palm, G.: Neural coding in graphs of bidirectional associative memories. *Brain Research*, 1434, 189-199, 2012
DOI 10.1016/j.brainres.2011.09.050
264. Glodek, M., Layher, G., Schwenker, F., Palm, G.: Recognizing human activities using a layered Markov architecture. In: Artificial Neural Networks and Machine Learning – ICANN 2012 (A. Villa, W. Duch, P. Erdi, F. Masulli, G. Palm, eds.), LNCS 7552, 677-684, Springer, Berlin, Heidelberg, 2012

265. Glodek, M., Schels, M., Palm, G., Schwenker, F.: Multi-modal fusion based on classifiers using reject options and Markov fusion networks. In: Proc. 21st Int. Conference on Pattern Recognition (ICPR'12), 1084-1087, 2012
266. Glodek, M., Schels, M., Palm, G., Schwenker, F.: Multiple classifier combination using reject options and Markov fusion networks. In: Proc. 14th SCM Int. Conference on Multimodal Interaction, 465-472, ACM, 2012
267. Glodek, M., Schwenker, F., Palm, G.: Detecting actions by integrating sequential symbolic and sub-symbolic information in human activity recognition. In: Proc. 12th Int Conference on Machine Learning and Data Mining (MLDM'12) (P. Perner, ed.). LNCS, 394-404, Springer, 2012
268. Knoblauch, A., Hauser, F., Gewaltig, M., Körner, E., Palm, G.: Does spike-timing-dependent synaptic plasticity couple or decouple neurons firing in synchrony? *Front. Comput. Neurosci.*, vol. 6, article 55, 2012
doi:10.3389/fncom.2012.00055
269. Oubbati, M., Uhlemann, J., Palm, G.: Adaptive learning in continuous environment using actor-critic design and echo-state networks. In: Proc. From Animals to Animats, vol. 746, 320-329, 2012
270. Scherer, S., Glodek, M., Schwenker, F., Campbell, N., Palm, G.: Spotting laughter in natural multiparty conversations: A comparison of automatic online and offline approaches using audiovisual data. *ACM Transactions on Interactive Intelligent Systems (TIIS)* - Special Issue on Affective Interaction in Natural Environments, vol. 2, issue 1, 1-31, 2012
271. Scherer, S., Glodek, M., Layher, G., Schels, M., Schmidt, M., Brosch, T., Tschechne, S., Schwenker, F., Neumann, H., Palm, G.: A generic framework for the inference of user states in human computer interaction: How patterns of low level communicational cues support complex affective states. *Journal on Multimodal User Interfaces*, Special Issue on “Conceptual Frameworks for Multimodal Social Signal Processing”, 117-141, 2012
272. Schmidt, M., Palm, G., Schwenker, F.: On graph-associated matrices and their eigenvalues for optical character recognition. In: Proc. of the 5th Int. Workshop on Artificial Neural Networks in Pattern Recognition, ANNPR 2012 (N. Mana, F. Schwenker, E. Trentin, eds.), LNAI 7477, 104-114, Springer, Heidelberg, 2012
273. Szczot, M., Löhlein, O., Palm, G.: Dempster-Shafer Fusion of Context Sources for Pedestrian Recognition. In: *Belief Functions: Theory and Applications* (T. Denoeux, M.-H. Masson, eds.), 319-326, AISC 164, Springer, Berlin, Heidelberg, 2012
274. Tokic, M., Ertle, P., Palm, G., Söffker, D., Voos, H.: Robust exploration/exploitation trade-offs in safety-critical applications. In: Proc. 8th Int. Symp. on Fault Detection, Supervision and Safety of Technical Processes, 660-665, 2012

275. Tokic, M., Palm, G.: Adaptive exploration using stochastic neurons. In: Artificial Neural Networks and Machine Learning - ICANN 2012 (A. Villa, W. Duch, P. Érdi, F. Masulli, G. Palm, eds.), LNCS 7553, 42-49, Springer, 2012
276. Tokic, M., Palm, G.: Gradient Algorithms for Exploration/Exploitation Trade-offs: Global and Local Variants. In: Proc. 5th Int. Workshop on Artificial Neural Networks in Pattern Recognition, ANNPR 2012 (N. Mana, F. Schwenker, E. Trentin, eds.), LNAI 7477, 60-71, Springer, Heidelberg, 2012
277. Bavafaye Haghigi, E., Rahmati M., Palm, G.: Non-linear Mapping to Multi-Dim. Optimal Regions with Application in Fast Data Mining. In: Proc. 5th Conf. on Information and Knowledge Techology (IKT 2013), 219-224, IEEE, 2013
DOI 10.1109/IKT.2013.6620068
278. Glodek, M., Geier, Th., Biundo-Stephan, S., Schwenker, F., Palm, G.: Recognizing User Preferences Based on Layered Activity Recotnition and First-Order Logic. In: Proc. IEEE 25th Int. Conference on Tools with Artificial Intelligence (ICTAI 2013), 648-653, 2013
279. Glodek, M., Trentin, F., Schwenker, F., Palm, G.: Hidden Markov models with graph densities for action recognition. In: Proc. Int. Conference on Neural Networks (IJCNN, 964-969, 2013
280. Gressmann, M., Palm, G., Löhlein, O.: Progressive pedestrian localization using neural networks. In: Topics in Intelligent Engineering and Informatics, vol. 3, 319-339, 2013
281. Koprinkova-Hristova, P., Oubbati, M., Palm, G.: Heuristic dynamic programming using echo state networks as online trainable adaptive critic. Int. J Adapt. Control Signal Process., 27, 902-914, 2013
282. Oubbati, M., Oess, T., Fischer, C., Palm, G.: Multiobjective reinforcement learning using actor-critic framework and reservoir computing. In: Proc. Reinforcement Learning with Generalized Feedback: Beyond Numeric Rewards (ECML13), 2013
283. Palm, G.: Neural associative memories and sparse coding. Neural Networks, 37, 165-171, 2013
doi:10.1016/j.neunet.2012.08.01
284. Palm, G., Glodek, M.: Towards emotion recognition in human computer interaction. In: Neural Nets and Surroundings. Proc. 22nd Italian Workshop on Neural Nets (WIRN 2012) (B. Apolloni S. Bassis, A. Esposito, F.C. Morabito, eds.). Smart Innovation, Systems and Technolgies Series, vol. 19, 323-336, Springer, Berlin, Heidelberg, 2013
DOI 10.1007/978-3-642-35467-0_32
285. Schels, M., Glodek, M., Schwenker, F., Palm, G.: Revisiting AVEC 2011 - an information fusion architecture. In: Neural Nets and Surroundings. Proc. 22nd Italian Workshop on Neural Nets (WIRN 2012) (B. Apolloni S. Bassis, A. Esposito, F.C. Morabito, eds.). Smart Innovation, Systems and Technolgies Series, vol. 19, 385-393, Springer, Berlin, Heidelberg, 2013

286. Schels, M., Glodek, M., Meudt, S., Scherer, S., Schmidt, M., Layher, G., Tschechne, S., Brosch, T., Hrabal, D., Walter, S., Traue, H., Palm, G., Neumann, H., Schwenker, F.: Multi-modal classifier-fusion for the recognition of emotions. In: Coverbal Synchrony in Human-Machine Interaction (M. Rojc, N. Campbell, eds.), 73-98, CRC Press, 2013
287. Thom, M., Palm, G.: Sparse Activity and Sparse Connectivity in Supervised Learning. *Journal of Machine Learning Research*, 14, 1091-1143, 2013
288. Tokic, M., Schwenker, F., Palm, G.: Meta-learning of exploration and exploitation parameters with replacing eligibility traces. In: Proc. 2nd IAPR Int. Workshop on “Partially Supervised Learning” (PSL 2013), (Z.-H. Zhou, F. Schwenker, eds.), LNAI 8183, 68-79, Springer, Berlin, Heidelberg, 2013
289. Wagner, R., Thom, M., Schweiger, R., Palm, G., Rothermel, A.: Learning convolutional neural networks from few samples. In: Proceedings of the Int. Joint Conference on Neural Networks, 1884-1890, 2013
290. Bavafaye Haghigi, E., Rahmati, M., Shiry Ghidary, S., Palm, G.: Mapping to optimal regions; A new method for multi-class classification task to reduce complexity. *AI Communications* 27, 387-404, 2014
DOI 10.3233/AIC-140607
291. Bavafaye Haghigi, E., Rahmati, M., Palm, G., Shiry Ghidary, S.: Learning inductive Riemannian Manifold in abstract form by modeling embedded dynamical system. *Informatica*, 25(3), 361-384, 2014
292. Glodek, M., Schels, M., Schwenker, F., Palm, G.: Combination of sequential class distributions from multiple channels using Markov fusion networks. *J. on Multimodal User Interfaces* 8(3), 257-272, 2014
293. Glodek, M., Geier, Th., Biundo, S., Palm, G.: A layered architecture for probabilistic complex pattern recognition to detect user preferences. *Biologically Inspired Cognitive Architectures*, 9, 46-56, 2014
DOI 10.1016/j.bica.2014.06.003
294. Kächele, M., Schels, M., Meudt, S., Kessler, V., Glodek, M., Thiam, P., Tschechne, S., Palm, G., Schwenker, F.: On annotation and evaluation of multi-modal corpora in affective human-computer interaction. In: Proc. Of Multimodal Analyses enabling Artificial Agents in Human-Machine Interaction. Springer, 2014
295. Kächele, M., Schels, M., Palm, G., Schwenker, F.: Inferring depression and affect from application dependent meta knowledge. In: Proc. 4th ACM Int. Workshop on Audio/Visual Emotion Challenge. ACM, 2014
296. Kächele, M., Thiam, P., Palm, G., Schwenker, F.: Majority-class aware support vector domain oversampling for imbalanced classification problems. In: Artificial Neural

Networks in Pattern Recognition (N. El Gayar, F. Schwenker, C. Suen, eds.), LNCS 8774, 83-92, Springer, Berlin, Heidelberg, 2014

297. Oubbati, M., Kord, B., Koprinkova-Hristova, P., Palm, G.: Learning of embodied interaction dynamics with recurrent neural networks: some exploratory experiments. *J. Neural Eng.* 11, 2014
DOI 10.1088/1741-2560/11/2/026019
298. Oubbati, M., Fischer, C., Palm, G.: Intrinsically motivated decision making for situated, goal-driven agents. In: Proc. From Animals to Animats: Simulation of Adaptive Behavior. Lecture Notes in Artificial Intelligence 8575, 166-175, 2014
299. Palm, G., Knoblauch, A., Hauser, F., Schüz, A.: Cell assemblies in the cerebral cortex. *Biol Cybern.* 108(5), 559-572, 2014
DOI 10.1007/s00422-014-0596-4
300. Schels, M., Scherer, S., Glodek, M., Kestler, H.A., Palm, G., Schwenker, F.: On the discovery of events in EEG data utilizing information fusion. *Computational Statistics*, 28(1), 5-18, 2014
301. Schmidt, M., Palm, G., Schwenker, F.: Spectral graph features for the classification of graphs and graph sequences. *Computational Statistics*, 29(1-2), 65-80, 2014
302. Thiam, P., Meudt, S., Kächele, M., Palm, G., Schwenker, F.: Detection of Emotional Events Utilizing Support Vector Methods in an Active Learning HCI Scenario. In Proc. 2014 Workshop on Emotion Representation and Modelling in Human-Computer-Interaction-Systems, 31-36, 2014
303. Bavafaye Haghghi, E., Palm, G., Rahmati, M., Yazdanpanah, M.J.: A new class of multi-stable neural networks: Stability analysis and learning process. *Neural Networks* 65, 53-64, 2015
DOI 10.1016/j.neunet.2015.01.010
304. Cubek, R., Ertel, W., Palm, G.: A critical review on the symbol grounding problem as an issue of autonomous agents. In: KI 2015, (S. Hölldobler et al., eds), 256-263, Springer, 2015
DOI 10.1007/978-3-319-24489-1_21
305. Glodek, M., Honold, F., Geier, Th., Krell, G., Nothdurft, F., Reuter, St., Schüssel, F., Hörnle, Th., Dietmayer, K., Minker, W., Biundo, S., Weber, M., Palm, G., Schwenker, F.: Fusion paradigms in cognitive technical systems for human-computer interaction. *Neurocomputing*, 161, 17-37, 2015
DOI 10.1016/j.neucom.2015.01.076
306. Glodek, M., Layher, G., Heilemann, F., Gawrilowicz, F., Palm, G., Schwenker, F., Neumann, H.: uulmMAD – Human action recognition dataset for ground-truth evaluation and investigation of view invariances. In: Multimodal Pattern Recognition of Social Signals in Human-Computer-Interaction. LNCS, 77-91, Springer, 2015

307. Grieb, M., Burkovski, A., Sträng, J.E., Kraus, J.M., Groß, A., Palm, G., Kühl, M., Kestler, H.A.: Predicting variabilities in cardiac gene expression with a Boolean network incorporating uncertainty. *PLOS ONE*, 2015
DOI 10.1371/journal.pone.0131832
308. Kächele, M., Rukavina, S., Palm, G., Schwenker, F., Schels, M.: Paradigms for the construction and annotation of emotional corpora for real-world human-computer-interaction. In: Proc. Int. Conf. on Pattern Recognition Applications and Methods (ICPRAM), 367-373, SciTePress, 2015
309. Kächele, M., Schels, M., Meudt, S., Kessler, V., Glodek, M., Thiam, P., Tschechne, S., Palm, G., Schwenker, F.: On annotation and evaluation of multi-modal corpora in affective human-computer interaction. In: Multimodal Analyses enabling Artificial Agents in Human-Machine Interaction, LNCS, 35-44, Springer, 2015
310. Schneider, M., Ertel, W., Palm, G.: Kernel feature maps from arbitrary distance metrics. In: Proceedings KI 2015 (S. Hölldobler et al., eds.), LNAI 9324, 137-150, Springer Int. Publishing, Switzerland, 2015
311. Thiam, P., Kächele, M., Palm, G., Schwenker, F.: Ensembles of support vector data description for active learning based annotation of affective corpora. IEEE Symposium Series on Computational Intelligence, 1801-1807, 2015
DOI 10.1109/SSCI.2015.251
312. Thom, M., Rapp, M.J., Palm, G.: Efficient Dictionary Learning with Sparseness-Enforcing Projections. *Int. J Comput Vis*, 114, 168-194, 2015
DOI 10.1007/s11263-015-0799-8
313. Meudt, S., Schmidt-Wack, M., Honold, F., Schüssel, F., Weber, M., Schwenker, F., Palm, G.: Going further in affective computing: How emotion recognition can improve adaptive user interaction. In: Toward Robotic Socially Believable Behaving Systems, Vol. I, Modeling Emotions (A. Esposito, L.C. Jain, eds.). Intelligent Systems Reference Library, 105, 73-103, Springer, Switzerland, 2016
314. Palm, G.: Neural Information Processing in Cognition: We Start to Understand the Orchestra, but Where is the Conductor? *Front. Comput. Neurosci.* 10:3, 2016
DOI 10.3389/fncom.2016.00003

Invited contributions

1. G. Palm: Asymptotic System Analysis and Goal Functions. In: Theoretical Approaches to Complex Systems (R. Heim and G. Palm, eds.), Springer, Berlin, Heidelberg, New York, 1978
2. G. Palm: Entropy for Dynamical Systems, Trabalho de Matematica No. 151, Fundacao Universidade de Brasilia, 1979

3. G. Palm: How useful are Associative Memories? In: Biomathematics in 1980 (L.M. Ricciardi and A.C. Scott, eds.), North-Holland Publishing Company, Amsterdam, 1982
4. G. Palm: Entropy for Markov Operators. Semesterbericht Funktionalanalysis, Tübingen, Sommersemester 1983
5. G. Palm: Local Synaptic Modification can Lead to Organized Connectivity Patterns in Associative Memory. In: Synergetics - From Microscopic to Macroscopic Order, (E. Frehland, ed.), Springer, Berlin, Heidelberg, New York, Tokyo, 1984
6. G. Palm: Natürliche und künstliche Intelligenz. In: Wissenschaftskolleg zu Berlin, Jahrbuch 1983/84 (P. Wapnewski ed.), Siedler, Berlin, 1985
7. G. Palm: Information und Entropie. In: Natur und Wissenschaft. (H. Hesse ed.), Konkursbuch, Tübingen, 1985
8. G. Palm: Associative Networks and Cell Assemblies. In: Brain Theory, (G. Palm, A. Aertsen, eds.) Springer, 1986
9. V. Braitenberg und G. Palm: Describing the Brain in Logical Terms or the Logical Terms in the Brain. Atti del Congresso "Logica e Filosofia della Scienza, oggi". Vol.II-Epistemologia e logica indutiva. CLUEB, Bologna (Italy) 1986
10. G. Palm: Assoziative Informationsspeicherung in Nervennetzen. In: Künstliche Intelligenz; Wesen und Bedeutung neuer Computerleistungen. (G. Marhold, ed.) VDI, Düsseldorf, 1987
11. G. Palm: Associative Memory and Threshold Control in Neural Networks. In: Real Brains - Artificial Minds. (J. L. Casti, A. Karlqvist, eds.) North-Holland, New York, Amsterdam, London, 1987
12. G. Palm: Comments on the Paper "Threshold Regulation - a Key to the Understanding of the Combined Dynamics of EEG and Event-Related Potentials" by T. Elbert and B. Rockstroh. Journal of Psychophysiology 4, 335-337, 1987
13. G. Palm: Modellvorstellungen auf der Basis neuronaler Netzwerke. In: Wissenspsychologie. (Heinz Mandl und Hans Spada, eds.). Psychologie-Verlags-Union, München, Weinheim, 1988
14. G. Palm: Local Synaptic Rules with Maximal Information Storage Capacity. In: Neural and Synergetic Computers. (H. Haken, ed.) Springer, Berlin, Heidelberg, New York, Tokyo, 1988
15. M. Erb und G. Palm: Lernen und Informationsspeicherung in Neuronalen Netzen. In: Digitale Speicher, ITG-Fachbericht 102, (W. Hilberg, ed.) VDE, Berlin, Offenbach, 1988

16. G. Palm: Quali sono le unità della rappresentazione neurale?. In: Mente umana mente artificiale (R. Viale, ed.) Feltrinelli, Mailand, 1989
17. Palm, G.: Gibt es eine Logik des Gehirns? oder Was kann die Hirnforschung über unsere Logik sagen?. In: Praktische Logik (Peter Klein, ed.). Vandenhoeck & Ruprecht, Göttingen, 1990
18. Erb, M., Aertsen, A. and Palm, G.: Stability in Physiology-Oriented Neuronal Network Models. In: 'Brain-Perception-Cognition' (N. Elsner, G. Roth, eds.), Thieme, Stuttgart, New York, 1990
19. Preißl, H., Aertsen, A. and Palm, G.: Are Fractal Dimensions a Good Measure for Neuronal Activity? In: 'Parallel Processing in Neural Systems and Computers' (R. Eckmiller, G. Hartmann, G. Hauske, eds.), Elsevier, Amsterdam, 1990
20. Palm, G.: Making Reasoning more Reasonable: Event-Coherence and Assemblies. Behavioural and Brain Sciences, 16/3, 470 ff., 1993
21. Palm, G.: Fünf Milliarden Bücher - Thesen, Modelle, Spekulationen - Wo steht die Gehirntheorie heute? Neue Zürcher Zeitung (NZZ) - Folio, Nr. 3, 45-47, 1994
22. Palm, G.: Natürliche und künstliche Intelligenz - natürliche und künstliche neuronale Netze. Kunstforum Bd 1 26, (Proceedings Steirischer Herbst: Große Gefühle - Simulation und Stimulation), 179-184, 1994
23. Palm, G.: Assoziatives Gedächtnis und Gehirntheorie. In: Evolution und Intelligenz (H. Imdahl, F.J. Radermacher, Hrsg.), 47-64, Schriftenreihe "Wissensverarbeitung und Gesellschaft" des FAW, 1994
24. Palm, G., Schwenker, F., Bibbig, A.: Theorie neuronaler Netze. Skript zur Vorlesung, Universität Ulm, 1994
25. Palm, G., Stellmann, U., Schwenker, F.: Analyse, Darstellung und ähnlichkeitserhaltende Codierung von Daten. In: Neuroinformatik Statusseminar des BMFT (Deutsche Forschungsanstalt für Luft- und Raumfahrt e.V., Hrsg.), 405-414, 1994
26. Aertsen, A., Erb, M., Palm, G., Schüz, A.: Coherent Assembly Dynamics in the Cortex: Multi-Neuron Recordings, Network Simulations and Anatomical Considerations. In: Proceedings Symposium "Oscillatory Event Related Brain Dynamics", Plenum, 1994
27. Palm, G.: Gehirntheorie, assoziatives Gedächtnis und neuronale Netze. In: Geist und Psyche. Fischer, 1995
28. Palm, G., Glünder, H.: Neuronale Netze: Biologie und Theorie. In: Proceedings der Herbstschule Konnektionismus und Neuronale Netze (HeKoNN'95), Münster. 1995

29. Palm, G.: Gehirntheorie, Neuronale Netze und assoziatives Gedächtnis. In: SINN'95 (E. Wismüller, D.R. Dersch, Hrsg.), 11-30. Proceedings zum Symposium über biologische Informationsverarbeitung und Neuronale Netze der Hanns-Seidel-Stiftung, 1996
30. Palm, G.: Information and Surprise in Brain Theory. In: Innere Repräsentationen - Neue Konzepte der Hirnforschung. DELFIN Jahrbuch (G. Rusch, S.J. Schmidt, O. Breidbach, Hrsg.), 153-173. stw-Reihe, Suhrkamp, Frankfurt, 1996
31. Palm, G., Rückert, U., Porrmann, M., Schwenker, F.: Neuronale Assoziativspeicher. In: Künstliche Intelligenz, Neuroinformatik und Intelligente Systeme. Tagungsband des BMBF Statusseminars, 419-432. Projektträger Informationstechnik des BMBF bei der Deutschen Forschungsanstalt für Luft- und Raumfahrt e.V. im Auftrag des BMBF, Referat 523 (Hrsg.), Berlin, 1996
32. Palm, G.: Gehirntheorie, neuronale Netze und assoziatives Gedächtnis. In: Neuropsychiatrie und Neurophilosophie (G. Northoff, Hrsg.), 105-125. Schöningh, Paderborn, 1997
33. Palm, G., Kraetzschmar, G.: SFB 527: Integration symbolischer und subsymbolischer Informationsverarbeitung in adaptiven sensomotorischen Systemen. In: Informatik '97 - Informatik als Innovationsmotor. Proceedings der 27. Jahrestagung der Gesellschaft für Informatik, Aachen, 1997 (M. Jarke, K. Pasedach, K. Pohl, Hrsg.). Springer, Berlin, Heidelberg, 1997
34. Palm, G., Wennekers, Th.: Synchronicity and its Use in the Brain. Commentary, Behavioral and Brain Sciences 20:4, 695-96, 1997
35. Mechsnner, F., Palm, G.: Is the Cerebellum Essentially a Precise Pattern Matching Device? Commentary in Behavioral and Brain Sciences 20:2, 257, 1997
36. Palm, G.: Significance Testing - Does it Need this Defence?. Book Review, Behavioral and Brain Sciences 21:2, 214-215, 1998
37. Palm, G.: How to Combine Interpolation with Feedback? Commentary, Behavioral and Brain Sciences 21:4, 478, 1998
38. Palm, G.: Gibt es eine Logik des Gehirns? oder Was kann die Hirnforschung über unsere Logik sagen? In: Proceedings Second International Artists Symposium, Ulm, 1998
39. Palm, G.: Facing Complexity: Against Scientific Oversimplification. Behavioral and Brain Sciences 22:5), 902-903, 1999
40. Baune, A., Simon, S., Kestler, H.A., Schwenker, F., Palm, G.: Implementierungsaspekte der Objektklassifikation unter SMARTSOFT. Ulmer SFB 527 Reports 1999/10, Universität Ulm, 1999

41. Kestler, H.A., Simon, S., Baune, A., Schwenker, F., Palm, G.: Object classification using simple, colour based visual attention and a hierarchical neural network for neuro-symbolic integration. Ulmer SFB 527 Reports 1999/4, Universität Ulm, 1999
42. Simon, S., Kestler, H.A., Baune, A., Schwenker, F., Palm, G.: Werkzeuge zur visuellen Objektklassifikation. Ulmer SFB 527 Reports 1999/3, Universität Ulm, 1999
43. Schwenker, F., Kestler, H.A., Palm, G.: An Algorithm for Adaptive Clustering and Visualisation of Highdimensional Data Sets. In: Computational Intelligence in Data Mining (G. della Riccia, R. Kruse, H-J. Lenz, eds.), 127-140, Springer, Wien, New York, 2000
44. Wennekers, Th., Palm, G.: Cell Assemblies, Associative Memory and Temporal Structure in Brain Signals. In: Time and the Brain. Conceptual Advances in Brain Research (Miller, R., ed.), vol. 3, 251-273, Harwood Academic Publishers, Amsterdam, 2000
45. Palm, G.: Information Fusion in Soccer-Playing Robots and Service Robotics. In: Proceedings of 4th Annual Conference on Information Fusion, FUSION 2001, Vol. III Montreal, CA, August, 2001
46. Dietrich, C., Schwenker, F., Riede, K., Palm, G.: Classification of Bioacoustic Time Series Utilizing Pulse Detection, Time and Frequency Features and Data Fusion. Ulmer Informatik-Berichte, Nr. 2001-04, 2001
47. Kestler, H.A., Schwenker, F., Palm, G.: RBF network classification of ECGs as a potential marker for sudden cardiac death. Ulmer Informatik Berichte Nr. 2001-03, 2001
48. Schwenker, F., Kestler, H.A., Palm, G.: 3D Visual Object Classification with Hierarchical RBF Networks. Ulmer Informatik Berichte Nr. 01-02, 2001
49. Elshaw, M., Knoblauch, A., Weber, C., Markert, H., Palm, G., Pulvermüller, F., Wermter, S.: Feedback to neuroscience based on language simulations. Technical Report 14, MirrorBot Project of the European Union, IST-2001-35282, 2004
50. Palm, G., Knoblauch, A.: Scene Segmentation through Synchronization. In: Neurobiology of Attention (Itti, L., Rees, G., Tsotsos, J.K., eds.), 618-623, Elsevier, San Diego, 2004
51. Kaufmann, U., Fay, R., Markert, H., Palm, G.: Neural Networks for Visual Object Recognition Based on Selective Attention. In: Proceedings of the 1st International SenseMaker Workshop on Life-Like Perception Systems, Ulster, Ireland, 2005
52. Knoblauch, A., Markert, H., Palm, G.: An associative cortical model of language understanding and action planning. Preprint Series Nr. 05006, Graduate School "Mathematical Analysis of Evolution, Information and Complexity", University of Ulm, 2005

53. Markert, H., Knoblauch, A. Palm, G.: Associative Language Processing in Cortical Areas. Preprint Series Nr. 05007, Graduate School "Mathematical Analysis of Evolution, Information and Complexity", University of Ulm, 2005
54. Kara-Kayikci, Z., Markert, H., Palm, G.: Speech Recognition using Neural Associative Memories and Hidden Markov Models. Technical Report, Promotionskolleg der Universität Ulm, 2007
55. Palm, G.: Information Theory for the Brain. In: Interdisciplinary Approaches to a New Understanding of Cognition and Consciousness (V. Braitenberg, F.J. Radermacher, eds.), 215-244, Wissensverarbeitung und Gesellschaft, die Publikationsreihe des FAW/n Ulm, Band 20, 2007
56. Knoblauch, A., Palm, G., Sommer, F.T.: Performance Characteristics of Sparsely and Densely Potentiated Associative Networks. HRI-EU Report 08-02, Honda Research Institute Europe GmbH, Offenbach/Main, Germany, 2008
57. Cardanobile, S., Markert, H., Mugnolo, D., Palm, G., Schwenker, F.: Relating Simulation and Modelling of Neural Networks. In: Mathematical analysis of evolution, information, and complexity (W. Arendt, W. Schleich, eds.), 137-155, Wiley-VCH, 2009
58. Kara-Kayikci, Z., Zaykovskiy D., Markert, H., Minker, W., Palm, G.: Distributed Architecture for Speech Controlled Systems Based on Associative Memories In: Mathematical analysis of evolution, information, and complexity (W. Arendt, W. Schleich, eds.), 197-218, Wiley-VCH, 2009
59. Kraus, J., Palm, G., Schwenker, F., Kestler, H.A.: Semi-supervised clustering functional genomics. In: Mathematical analysis of evolution, information, and complexity (W. Arendt, W. Schleich, eds.), 243-271, Wiley-VCH, 2009
60. Palm, G., Schwenker, F.: Sensor-Fusion in Neural Networks. In: Harbour Protection Through Data Fusion Technologies (Shabazian, E., Rogova, G., de Weert, M.J., eds), NATO Science for Peace and Security Series - C, 299-306, Springer Science + Business Media B.V., 2009
61. Palm, G.: Assoziatives Gedächtnis und Gehirntheorie. In: Mensch, Technik, Kommunikation. Beiträge zur Informatisierung in Gesellschaft, Recht, Ökonomie und Technik (Alcatel-Lucent Stiftung, Hrsg.). Alcatel-Lucent Stiftung, 2009
62. Scherer, S., Schwenker, F., Palm, G.: Classifier fusion for emotion recognition from speech. In: Advanced Intelligent Environments (W. Minker, M. Weber, H. Hagras, V. Callagan, A.D. Kameas. eds.), 95-117, Springer, 2009
63. Schels, M., Scherer, S., Glodek, M., Kestler, H.A., Schwenker, F., Palm, G.: A Hybrid Information Fusion Approach to Discover Events in EEG Data. In. Statistical Computing 2010 (H. Kestler, H. Binder, B. Lausen, H.-P. Klenk, M. Schmid, F. Leisch (eds.), Ulmer Informatik Berichte Nr. 2010-05, 34-36, 2010

Abstracts

- 1) Erb, M., Aertsen, A. and Palm, G.: Functional Connectivity in Neuronal Systems: Context-Dependence of Effective Network Organization Does Not Require Synaptic Plasticity. In: 'Dynamics and Plasticity in Neuronal Systems' (N. Elsner, W. Singer, eds.), Thieme, Stuttgart, New York, 1989
- 2) Erb, M., Aertsen, A. and Palm, G: Context-Dependence of Effective Connectivity in Neuronal Nets without Synaptic Plasticity. Eur. J. Neurosci. Suppl. 2, 67, 1989
- 3) Preißl, H., Aertsen, A. and Palm, G.: A Non-Linear Dynamical Systems Approach to the Analysis of Neuronal Activity. Eur. J. Neurosci. Suppl. 2, 172, 1989
- 4) Preißl, H., Aertsen, A. and Palm, G.: Are Fractal Dimensions Relevant for the Description of Neuronal Activity? In: 'Dynamics and Plasticity in Neuronal Systems' (N. Elsner, W. Singer, eds.), Thieme, Stuttgart, New York, 1989
- 5) Palm, G., Holthausen, O., Schwenker, F., Sommer, F.T., Strey, A.: PAN IV - Massively Parallel Neural Associative Memory, CeBit, 1994
- 6) Bibbig, A., Wenckers, Th., Palm, G.: A Neural Network Model of the Cortico-Hippocampal Interplay and the Representation of Contexts. In: Göttingen Neurobiology Report 1994: Proceedings of the 22nd Göttingen Neurobiology Conference 1994, Vol. II (Elsner, N., Breer, H., eds.), Thieme, Stuttgart, New York, 1994
- 7) Bibbig, A., Wenckers, Th., Palm, G.: Hippocampal Sharp Waves, Theta-Rhythm and Their Relation to Learning - A Numerical Study. In: Göttingen Neurobiology Report 1995: Proceedings of the 23rd Göttingen Neurobiology Conference 1995, Vol. 2 (Elsner, N., Menzel, R., eds.). Thieme, Stuttgart, New York, 1995
- 8) Bibbig, A., Wenckers, Th., Palm, G.: Two Stage Learning and Memory Consolidation - A Computer Simulation. In: Göttingen Neurobiology Report 1996: Proceedings of the 24th Göttingen Neurobiology Conference 1996, (N. Elsner, H.U. Schnitzler, eds.), Thieme, Stuttgart, New York, 1996
- 9) Borst, M., Palm, G.: Periodicity Pitch Detection and Pattern Separation using Biologically Motivated Neural Networks. In: Proc. 6. Tübinger Wahrnehmungskonferenz, 52, 2003
- 10) Borst, M., Palm, G.: Periodicity Pitch Detection and Sound Separation with Spiking Neural Networks In: Proceedings of the 29th Göttingen Neurobiology Conference (Elsner, Zimmermann, eds.), 1046, Thieme Verlag, 2003
- 11) Knoblauch, A., Palm, G.: Binding and Synchronization in Reciprocally Connected Cortical Areas. In: Elsner, Zimmermann (eds.): Proceedings of the 29th Göttingen Neurobiology Conference, 1045-1046, 2003

- 12) Palm, G., Kaufmann, U., Fay, R.: A two-stage scheme for visual object recognition based on selective attention. In: Proceedings of the European Conference on Visual Perception (ECVP), Budapest, 2004
- 13) Oubbat, M., Palm, G.: A Biologically Inspired Control for Robot Navigation. In: Proc. Conference on "Robotics: Science and Systems", 2008
- 14) Hauser, F., Bouchain, D., Palm, G.: Correlation-based learning in resonate-and-fire neurons. In: Proceedings, Computational and Systems Neuroscience, Salt Lake City, USA, 2009
- 15) Palm, G.: What does it mean to do neuroscientific research on emotions and consciousness and does it allow or even need a computational perspective? In: ECAP10 - VIII European Conference on Computing and Philosophy (G. Mainzer, ed.), 181-184, Dr. Hut, München, 2010