

Curriculum Vitae: Morten Mørup

CURRENT POSITION	Professor, Section for Cognitive Systems, DTU Compute
PERSONAL	Born 12 January 1978, married to Sara Bohnstedt Mørup, father to Hannibal, Jonathan, and Nikolaj.
CONTACT INFORMATION	<p>Home Slotsvænget 26 2800 Kgs. Lyngby Denmark <i>phone:</i> +45 27 29 29 75 <i>e-mail:</i> morten.morup@gmail.com <i>www:</i> www.mortenmorup.dk</p> <p>Work Cognitive Systems, DTU Compute Richard Petersens Plads, bld. 321/118 DK-2800 Kgs. Lyngby <i>phone:</i> +45 45 25 39 00 <i>e-mail:</i> mmor@dtu.dk <i>www:</i> www.mortenmorup.dk</p>
EDUCATION AND RESEARCH EXPERIENCE	<p>Copenhagen University Bio-physics and Mathematics: (Fall 1999 - Summer 2001)</p> <p>Washington State University Exchange student following courses within Computational Neuroscience (Spring 2004)</p> <p>Technical University of Denmark Cand. Polyt. Applied Mathematics (February 2005) PhD Intelligent Signal Processing Group at DTU Informatics (29. September 2008) Dissertation title: Decomposition Methods for Unsupervised Learning. PostDoc Intelligent Signal Processing Group at DTU Informatics (2008-2009) Project: PERCEPT: Perceptual Consciousness - Explication and Testing Assistant Professor, Section for Cognitive Systems, DTU Informatics (2010-2012) Associate Professor, Section for Cognitive Systems, DTU Compute (2012-2019) Professor of Machine Learning for the Life-Sciences (current position), Section for Cognitive Systems, DTU Compute (2020-)</p> <p>Stanford University Visiting Ph.D. Student at Department for Scientific Computing (Summer 2006 - Fall 2006) Host: Professor Gene H. Golub</p> <p>UC Berkeley Visiting Ph.D. Student at Department of Mathematics (Fall 2007) Host: Morrey Assistant Professor Lek-Heng Lim</p>
PERIODS OF LEAVE	Paternity leave (2/3/2014-16/3/2014 (2 weeks) + 27/10/2014-16/1/2015 (12 weeks) +27/6/2016-10/7/2016 (2 weeks) + 29/5/2017-18/8/2017(12 weeks).
FUNDING AND AWARDS	Ingeborg og Leo Dannins scholarship for scientific research 2021 (300.000 DKK) DFF-FTP project 2 "Learning the Structure and Dynamics of Complex Networks" (~6 mio DKK) Conferred among best reviewers of Neural Information Processing Systems (NIPS) 2018. Best student paper (PhD J. L. Hinrich) at IEEE International Workshop on Machine Learning for Signal Processing 2018. H.K.H. Prinsgemalens Fond (His Royal Highness The Prince's Foundation) 2013 (15.000 DKK) Lundbeck Foundation Fellowship 2012 (10 mio. DKK) Best Teacher at DTU Informatics 2011 (awarded 2012) Best Thesis Award: Direktør Peter Gorm-Petersens Mindelegat 2008 (14.000 DKK) Elite Research Travel Scholarship 2007: Danish Ministry of Science (250.000 DKK) Travel Award: Organization for Human Brain Mapping 2005
MANAGEMENT EXPERIENCE	Principal investigator of the DFF-FTP project 2 funded project (6 Mio. DKK, 2020-2024): Learning the Structure and Dynamics of Complex Networks. Principal investigator of the Lundbeck Foundation funded project (10 Mio. DKK, 2012-2017): Non-parametric Relational Modeling of Functional and Structural Brain Connectivity, see also brainconnectivity.compute.dtu.dk . Completed in 2016 the Project Management Program for managers of research projects offered by Implement Consulting Group. Completed in 2016 the DTU Leadership Programme. Head of Studies BSc. Eng. Artificial Intelligence and Data, DTU Compute (since December 2018)
MEETINGS AND SPECIAL SESSIONS ORGANIZED	2009 European Workshop on Challenges in Modern Massive Data Sets, Organizer (with L.-H. Lim, M. Mahoney, L.K. Hansen, G. Carlsson), Technical University of Denmark, Lyngby, Denmark, July 1-4, 2009. (http://mmds.imm.dtu.dk) 2012 Special Session on Social Network Analysis, IEEE Workshop on Machine Learning and Signal Processing, Organizer (with Lars Kai Hansen), Santander, Spain, September 25th, 2012 2013 Satellite Symposium on Complex Networks meet Machine Learning in conjunction with NetSci2013, Organizer (with M. N. Schmidt, T. Herlau, and L. K. Hansen), Technical University of Denmark, June 4th, 2013. (www.imm.dtu.dk/tuhe/cnmml) 2017 Programme Committee member of The Brain Prize Meeting Rewarding Neuroscience (http://www.thebrainprize.org/flx/outreach/the_brain_prize_meeting_2017/)
PROFESSIONAL ACTIVITIES	Member of the Machine Learning for Signal Processing Technical Committee of the IEEE Signal Processing Society (2009-2015). Reviewer for the Netherlands Organisation for Scientific Research (NWO), European Research Council (ERC), High Technology Foundation of Denmark (Højteknologifonden), Vetenskapsrådet (VR) in Sweden. Guest editor: Special issue on "Recent Advances in Tensor Based Signal and Image Processing" for EURASIP Journal on Advances in Signal Processing. Guest editor: Special issue on "Advances in Nonnegative Matrix and Tensor Factorization", Computational Intelligence and Neuroscience, 2008. Guest editor: Special issue on "Combined EEG in Research and Diagnostics: novel perspectives and improvements", Frontiers in Neuroscience, 2022. Research scientist/consultant for FOSS (November 2012 - October 2014). Editorial Member of IEEE Transactions on Signal Processing (2015-2016). Area Chair of AISTATS 2020 and 2021.
SCIENTIFIC FOCUS AREA	My field of research is machine learning and data science where I research methods for unsupervised learning and pattern recognition. Current research interests include multi-way data analysis, complex network modeling and non-parametric Bayesian inference with application to life-science data and social network modeling.

INTERNATIONAL RELATIONS Current collaborators include Martin Rosvall (Umeå University) and Yong-yeol Ahn (Indiana University Bloomington). Past collaborators include Marcel Van Gerven (Radboud University), Nathan Churchill (St. Michaels Hospital, Toronto), David Dunson (Duke University), Yee Whye Teh (Oxford University), Tamara G. Kolda (Sandia National Laboratories), Lek-Heng Lim (University of Chicago), Ryota Tomioka (Microsoft Research).

SELECTED INVITED TALKS (SINCE 2010) IDA Future Talks, Perspektiverne i Kunstig Intelligens og Machine Learning, Copenhagen, 2020, <https://tv.ida.dk/video/61165943/future-talks-2020-morten-morup>.
Tensor Decomposition using Variational Bayesian Inference, Low-rank Optimization and Applications, Leipzig, Germany 2019.
Introduction to machine learning, Copenhagen Bioscience Lecture, Copenhagen, 2019.
Probabilistic Tensor Decomposition - Accounting for Uncertainty using Bayesian Inference, Simula's seminar series, Oslo, Norway 2018.
From data to biomarkers using machine learning within functional neuroimaging, Biomarkers – the key to personalized health, HighTech Summit, Lyngby, 2018.
Directional statistics and Bayesian inference for the modelling of functional neuroimaging data, Machine Learning and Molecules, Copenhagen, 2017.
Tensor Applications in Neuroscience, Dagstuhl Perspectives Workshop 16152 Tensor Computing for Internet of Things, Schloss Dagstuhl, Germany, 2016.
Modelling Neuroimaging Data Using Tensor Decompositions, TDA2016 Workshop on Tensor Decompositions and Applications, Leuven, Belgium, 2016.
Non-parametric Bayesian Modeling of Relational Data, SIMBAD 3rd International Workshop on Similarity-Based Pattern Analysis and Recognition, Copenhagen, 2015.
Non-parametric Bayesian Modeling of Functional and Structural Brain Connectivity, ICML Workshop on Statistics, Machine Learning and Neuroscience (Stamfins), Lille, France 2015
Lineært er ikke altid bedst, Dansk Selskab for Kemometri (DSK) webinar, Copenhagen, 2015.
Modeling Neuroimaging Data using Tensor Decompositions, Seminar at the Artificial Intelligence Department at Radboud University Nijmegen, January 2014.
Multivariate statistical methods to integrate imaging data from different imaging modalities, PhD course: Multimodal brain imaging - interfacing neuroimaging and computational methods, Danish Research Centre for Magnetic Resonance, Hvidovre Hospital, October 2013.
Application of tensor decomposition for the modeling of neuroimaging data, Modles Tensoriels et Applications, Séminaire I3S, Nice, October 2013.
Tensor Decompositions for Machine Learning and the Modelling of Neuroimaging Data, ECML/PKDD workshop on Tensor Methods for Machine Learning, Prague, September 2013.
Social network analysis by non-parametric bayesian relational models, Vision Day at DTU Compute, 2013.
Bayesian Approaches to Decomposing Tensors, JSM2013 session on The Intersection of Tensor Analysis and Statistics, Montreal Canada, 2013.
Tensor Decomposition Approaches for the Modeling of Multi-Graphs, TRICAP 2012, Brücke, Netherlands, 2012.
Non-parametric Bayesian Models for Complex Networks, Vision Day at DTU Compute 2012.
Bayesian Models for Complex Networks, BioComplexity Meetings and Special Lectures 2012, NBI, Copenhagen University, 2012.
Psychology and Brain 2011 symposium on Applying Trilinear Component Analysis to ERP and fMRI data, Heidelberg, Germany, June 2011.
Inauguration Symposium of the Contact project granted by the Lundbeck Foundation, Charlottenlund, May 2011.
Applications of tensor decomposition in data mining and machine learning, NIPS workshop on Tensors Kernels and Machine Learning, Canada 2010.
Bayesian Methods for Tensor Decompositions, BIT50 - Trends in Numerical Computing, Lund, Sweden, June 2010.
Shape and latency modeling of neuroimaging data, Machine Learning Seminar, TU Berlin, 2010.
Shape and latency modeling of neuroimaging data, Institute for Computing and Information Sciences Radboud University Nijmegen, 2010.

REVIEWING EXPERIENCE Statistics in Medicine, ISCAS, Computational Intelligence and Neuroscience, EURASIP JASP, IEEE Transactions on Biomedical Engineering, Journal of Neuroscience Methods, Computer Physics Communication, Signal Processing, Journal of Chemometrics, EUSIP, Neural Processing Letters, Data Mining and Knowledge Discovery, IEEE workshop on Machine Learning for Signal Processing (MLSP), Latent Variable Analysis and Signal Separation (LVA/ICA), IEEE International Conference on Acoustics Speech and Signal Processing (ICASSP), NeuroImage, The Journal of Neuroscience, Human Brain Mapping (Wiley), Transactions on Pattern Analysis and Machine Intelligence (TPAMI), Neural Computation, Linear Algebra and its Applications, ICANN, MICCAI, NeuroComputing, IEEE Transactions on Signal Processing, ICONIP, Cognitive Information Processing (CIP), SIMAX, PLoS ONE, Physics Letters A, SDM, NeurIPS, Nature Methods, Proceedings of the IEEE, IEEE Transactions on Image Processing Journal, IEEE Journal of Selected Topics in Signal Processing, Journal of Machine Learning Research, ICML, ICLR, AISTATS.

TEACHING EXPERIENCE AND SUPERVISION OF STUDENTS At DTU Compute I have been involved in the following courses:
02450: Introduction to Machine Learning and Data Mining (since Spring 2010)
02582: Computational Data Analysis (since Spring 2010)
02901: Advanced Topics in Machine Learning (since Summer 2008)
02910: PhD course on Computational Data Analysis (since Summer 2012)
02405: Probability Theory (2005-2007)
02409: Multivariate Statistics (2004-2005)
02701: Introduction to Operations Research (2002-2003)
Given lectures or assisted in the following courses: 02451 Digital Signal Processing, 02457 Non-linear signal processing, 02459 Machine Learning for Signal Processing, 02460 Advanced Machine Learning.
Supervised special courses, bachelor and master student projects.
Co-supervision of PhD: Total 9 / currently 1.
Supervision of PhD: Total 10/ currently 3.
Supervision of PostDoc: Total 8 / currently 2.

PEER REVIEWED PUBLICATIONS **More than one hundred journal and conference contributions accumulated.**
Total of 4652 Google Scholar (H-index 29) and 1763 ISI citations (H-index 19) as of 29th November 2022.
(The H-index is calculated as the largest number H such that at least H articles are each cited at least H times.)
Orcid: <https://orcid.org/0000-0003-4985-4368>

Articles

1. A.S. Olsen, A. Lykkebo-Valløe, B. Ozenne, M.K. Madsen, D.S. Stenbæk, S. Armand, M. Mørup, M. Ganz, G.M. Knudsen, P.M. Fisher, 2022, Psilocybin modulation of time-varying functional connectivity is associated with plasma psilocin and subjective effects. *NeuroImage*, 119716.
2. A.S. Olsen, R.M.T. Høegh, J.L. Hinrich, K.H. Madsen, M. Mørup, 2022, Combining electro-and magnetoencephalography data using directional archetypal analysis *Frontiers in Neuroscience* 16
3. K. J. Albers, M. G. Liptrot, K. S. Ambrosen, R. Røge, T. Herlau, K. W. Andersen, H. R. Siebner, L. K. Hansen, T. B. Dyrby, K. H. Madsen, M. N. Schmidt, M. Mørup, 2022, Uncovering Cortical Units of Processing From Multi-Layered Connectomes, *Frontiers in Neuroscience* 16
4. K.J. Albers, K.S. Ambrosen, M.G. Liptrot, T.B. Dyrby, M.N. Schmidt, **M. Mørup**, 2021, Using connectomics for predictive assessment of brain parcellations, *NeuroImage* 238, 118170
5. M.N. Schmidt, D. Seddig, E. Davidov, **M. Mørup**, K.J. Albers, J.M. Bauer, F. K. Glückstad, Latent profile analysis of human values: What is the optimal number of clusters?, *Methodology* 17 (2), 127-148
6. D.N. Thyde, A. Mohebbi, H. Bengtsson, M.L. Jensen, **M. Mørup**, 2021, Machine Learning-Based Adherence Detection of Type 2 Diabetes Patients on Once-Daily Basal Insulin Injections, *Journal of Diabetes Science and Technology* 15(1), 98-108
7. K.J. Albers, **M. Mørup**, M.N. Schmidt, F.K. Glückstad, 2020, Predictive evaluation of human value segmentations, *The Journal of Mathematical Sociology*, 1-28
8. J.L. Hinrich, K.H. Madsen, **M. Mørup**, 2020, The probabilistic tensor decomposition toolbox, *Machine Learning: Science and Technology* 1 (2), 025011
9. P. Taborsky, L. Vermue, M. Korzepa, **M. Mørup**, 2020, The Bayesian Cut, *IEEE Transactions on Pattern Analysis and Machine Intelligence (BFI Niveau 2)*
10. C.S. Musaeus, K. Engedal, P. Høgh, V. Jelic, A.R. Khanna, T.W. Kjær, **M Mørup**, M. Naik, A.-R. Oeksengaard, E. Santarnecchi, J. Snaedal, L.-O. Wahlund, G. Waldemar, B. B. Andersen, 2020, Changes in the left temporal microstate are a sign of cognitive decline in patients with Alzheimer's disease, *Brain and Behavior*, e01630
11. F.K. Glückstad, M.N. Schmidt, **M. Mørup**, 2020, Testing a model of destination image formation: Application of Bayesian relational modelling and fsQCA: Application of Bayesian Relational Modelling and fsQCA, *Journal of Business Research*
12. K.S. Ambrosen, S.F. Eskildsen, M. Hinne, K. Krug, H. Lundell, M.N. Schmidt, M. AJ van Gerven, **M. Mørup**, Tim B Dyrby, 2020, Validation of structural brain connectivity networks: The impact of scanning parameters, *NeuroImage* 204, 116207
13. U. Aslak, S. F. V. Nielsen, **M. Mørup**, S. Lehmann, 2019, Temporally intermittent communities in brain fMRI correlation networks, *Applied Network Science* 4 (1), 65
14. C. S. Musaeus, K. Engedal, P. Høgh, V. Jelic, **M. Mørup**, M. Naik, A.-R. Oeksengaard, J. Snaedal, L.-O. Wahlund, G. Waldemar, B. B. Andersen, 2019, Oscillatory connectivity as a diagnostic marker of dementia due to Alzheimer's disease, *Clinical Neurophysiology* 130 (10), 1889-1899
15. L. G. Krohne, Y. Wang, J. L. Hinrich, **M. Mørup**, R. C. K. Chan, K. H. Madsen, 2019, Classification of social anhedonia using temporal and spatial network features from a social cognition fMRI task, *Human Brain Mapping*.
16. K. M. Larsen, **M. Mørup**, M. R. Birknow, E. Fischer, L. Olsen, M. Didriksen, W. F. C. Baaré, T. M. Werge, M. I. Garrido, H. R. Siebner, 2019, Individuals with 22q11. 2 deletion syndrome show intact prediction but reduced adaptation in responses to repeated sounds: evidence from Bayesian mapping, *NeuroImage: Clinical*, 101721.
17. M. N. Schmidt, **M. Mørup**, 2019, Efficient computation for Bayesian comparison of two proportions, *Statistics & Probability Letters* Vol. 145, pp. 57-62
18. C.S. Musaeus, K. Engedal, P. Høgh, V. Jelic, **M. Mørup**, M. Naik, A.-R. J. Snaedal, L.-O. Wahlund, G. Waldemar, B. B. Andersen, 2018, EEG Theta Power Is an Early Marker of Cognitive Decline in Dementia due to Alzheimers Disease, *Journal of Alzheimer's Disease*, vol. 64, no. 4, pp. 1359-1371.
19. L. Frølich, T.S. Andersen, **M. Mørup**, 2018, Rigorous optimisation of multilinear discriminant analysis with Tucker and PARAFAC structures, *BMC bioinformatics* 19 (1), 197. (BFI niveau 1)
20. S. F. V Nielsen, M. N. Schmidt, K. H. Madsen, **M. Mørup**, 2018, Predictive assessment of models for dynamic functional connectivity, *NeuroImage* 171, pp. 116-134.
21. K. M. Larsen, **M. Mørup**, M. R. Birknow, E. Fischer, O. Hulme, A. Vangkilde, H. Schmock, W. Frans C. Baaré, M. Didriksen, L. Olsen, T. Werge, H. R. Siebner, M. I. Garrido, 2018, Altered auditory processing and effective connectivity in 22q11. 2 deletion syndrome, *Schizophrenia Research* Vol. 197, pp. 328-336.
22. K. M. Larsen, G. Pellegrino, M. R. Birknow, T. N. Kjær, W. F. C. Baaré, M. Didriksen, L. Olsen, T. Werge, **M. Mørup**, H. R. Siebner, 2017, 22q11. 2 Deletion Syndrome Is Associated With Impaired Auditory Steady-State Gamma Response, *Schizophrenia Bulletin*, sbx058.
23. R. E. Røge, K. H. Madsen, M. N. Schmidt, **M. Mørup**, 2017, Infinite von Mises–Fisher Mixture Modeling of Whole Brain fMRI Data, *Neural Computation* Vol. 29(10), pp. 2712-2741.
24. M. Hinne, A. Meijers, R. Bakker, P. H. E. Tiesinga, **M. Mørup**, M. A. J. van Gerven, 2017, The missing link: Predicting connectomes from noisy and partially observed tract tracing data, *PLOS Computational Biology*, <http://dx.doi.org/10.1371/journal.pcbi.1005374>
25. F. K. Glückstad, M.N. Schmidt, **M. Mørup**, 2017, Examination of heterogeneous societies: Identifying subpopulations by contrasting cultures, *Journal of Cross-Cultural Psychology* 48 (1), 39-57
26. K. H. Madsen, N. W. Churchill, **M. Mørup**, 2017, Quantifying functional connectivity in multi-subject fMRI data using component models, *Human Brain Mapping* Vol. 38(2), pp 882–899. (BFI niveau 1)
27. N. W. Churchill, K. Madsen, **M. Mørup**, 2016, The Functional Segregation and Integration Model: Mixture Model Representations of Consistent and Variable Group-Level Connectivity in fMRI, *Neural Computation* Vol. 28(10), pp.2250-2290. (BFI niveau 2)
28. J. L. Hinrich, S. E. Bardenfleth, R. E. Røge, N. W. Churchill, K. H. Madsen, **M. Mørup**, 2016, Archetypal Analysis for Modeling Multisubject fMRI Data, in *IEEE Journal of Selected Topics in Signal Processing*, vol. 10(7), pp. 1160-1171. (BFI niveau 2)
29. H. Schmock, A. Vangkilde, K. M. Larsen, E. Fischer, M. R. Birknow, J. R. M. Jepsen, C. Olesen, F. Skovby, K. J. Plessen, **M. Mørup**, O. Hulme, W. F. C. Baaré, M. Didriksen, H. R. Siebner, T. Werge, L. Olsen, 2015, The Danish 22q11 research initiative, *BMC psychiatry* vol. 15(1), 220.
30. L. Frølich, T. S. Andersen, **M. Mørup**, 2015, Classification of independent components of EEG into multiple artifact classes, *Psychophysiology* vol 52(1), pp. 32-45.
31. S. M. Arnfred, A. Raballo, **M. Mørup**, J. Parnas, 2015, Self-Disorder and Brain Processing of Proprioception in Schizophrenia Spectrum Patients: A Re-Analysis, *Psychopathology*, vol. 48, pp. 60-64.
32. T. Herlau, M. N. Schmidt, **M. Mørup**, 2014, Infinite-degree-corrected stochastic block model, *Physical Review E*, vol 90(3), 032819.

33. K. W. Andersen, K. H. Madsen, H. R. Siebner, M. N. Schmidt, **M. Mørup**, L. K. Hansen, 2014, Non-parametric Bayesian graph models reveal community structure in resting state fMRI, *NeuroImage*, vol. 100, pp. 301-315.
34. F. K. Glückstad, T. Herlau, M. N. Schmidt, **M. Mørup**, 2014, Cross-categorization of legal concepts across boundaries of legal systems: in consideration of inferential links, *Artificial Intelligence and Law*, vol. 22, pp. 61-108.
35. N. Wangdong, L. Nørgaard, **M. Mørup**, 2014, Non-linear calibration models for NIR spectroscopy, *Analytica Chimica Acta*, vol. 813, pp. 1-14.
36. J. C. Thøgersen, **M. Mørup**, S. Damkiær, S. Molin, L. Jelsbak, 2013, Archetypal analysis of diverse *Pseudomonas aeruginosa* transcriptomes reveals adaptation in cystic fibrosis airways, *BMC Bioinformatics*, vol. 14(279).
37. M. N. Schmidt, **M. Mørup**, 2013, Non-parametric Bayesian modeling of complex networks, *IEEE Signal Processing Magazine*, vol 30(3), pp. 110-128. (BFI niveau 2)
38. **M. Mørup**, M. N. Schmidt, 2012, Bayesian Community Detection, *Neural Computation* vol. 24(9), pp. 2434-56. This publication comes with an errata: **M. Mørup**, M. N. Schmidt, 2014, Errata to Bayesian Community Detection, *Neural computation* 26(6) pp. 1236-1237.
39. **M. Mørup**, L. K. Hansen, 2012, Archetypal Analysis for Machine Learning and Data Mining, *NeuroComputing* vol. 80, pp. 54-63.
40. **M. Mørup**, 2011, Applications of tensor (multi-way array) factorizations and decompositions in data mining, *Wiley DMKD* vol. 1(1), pp. 24-40. (BFI niveau 1)
41. C. Stahlhut, **M. Mørup**, O. Winther, L. K. Hansen, 2010, Simultaneous EEG Source and Forward Model Reconstruction (SOFOMORE) using a Hierarchical Bayesian Approach, *Journal of Signal Processing Systems*, pp. 1-14.
42. E. Acar, D. M. Dunlavy, T. G. Kolda, **M. Mørup**, 2010, Scalable tensor factorizations for incomplete data, in press *Chemometrics and Intelligent Laboratory Systems*. (BFI niveau 2)
43. S. M. Arnfred, **M. Mørup**, J. Thalbitzera, L. Janssona, J. Parnas, 2010, Attenuation of beta and gamma oscillations in schizophrenia spectrum patients following hand posture perturbation, *Psychiatric Research*, vol. 185(1-2), pp. 215-224.
44. I. Griskova, **M. Mørup**, Josef Parnas, Osvaldas Ruksenas, Sidse M. Arnfred, 2009, Two discrete components of the 20 Hz steady-state response are distinguished through the modulation of activation level. *Clinical Neurophysiology*, vol. 120, pp. 904-909.
45. **M. Mørup**, L.K. Hansen, 2009, Automatic Relevance Determination for multi-way models, *Journal of Chemometrics*, vol. 23(7-8), pp. 352-363.
46. **M. Mørup**, L.K. Hansen, S.M. Arnfred, L.-H. Lim, K.M. Madsen, 2008, Shift Invariant Multilinear Decomposition of Neuroimaging Data. *NeuroImage* vol. 42(4), pp.1439-50. (BFI niveau 2)
47. **M. Mørup**, L. K. Hansen, S. M. Arnfred, 2008, Algorithms for Sparse Nonnegative Tucker Decomposition. *Neural Computation*, vol. 20 no. 8, pp. 2112-2131. (BFI niveau 2)
48. S. M. Arnfred , L. K. Hansen, J. Parnas, **M. Mørup**, 2008, Regularity increases middle latency evoked and late induced beta brain response following proprioceptive stimulation. *Brain Research*, vol. 1218, pp. 114-131.
49. I. Griskova, **M. Mørup**, J. Parnas, O. Ruksenas, O., S.M. Arnfred, 2007, The amplitude and phase precision of 40 Hz auditory steady-state response depend on the level of arousal. *Experimental Brain Research*, vol. 183(1), pp. 133-138.
50. **M. Mørup**, L.K. Hansen, S.M. Arnfred, 2007, ERPWAVELAB A toolbox for multi-channel analysis of time-frequency transformed event related potentials. *Journal of Neuroscience Methods*, vol. 161, pp. 361-368.
51. S.M. Arnfred, L.K. Hansen, L. K., J. Parnas, **M. Mørup**, 2007, Proprioceptive Evoked Gamma Oscillations. *Brain Research*, vol. 1147, pp. 167-174.
52. **M. Mørup**, L. K. Hansen, C. S. Hermann, J. Parnas, S. M. Arnfred, 2006, Parallel Factor Analysis as an exploratory tool for wavelet transformed event-related EEG. *NeuroImage*, vol. 29(3), pp. 938-947. (BFI niveau 2)
53. F. Calamante, **M. Mørup**, L. K. Hansen, 2004, Defining a local arterial input function for perfusion MRI using independent component analysis, *Magnetic Resonance in Medicine*, vol. 2(4), pp. 789-797.

Refereed Proceedings

1. N. Nakis, A. Çelikkanat, M. Mørup, 2022, HM-LDM: A Hybrid-Membership Latent Distance Model, *COMPLEX NETWORKS 2022: ELEVENTH INTERNATIONAL CONFERENCE ON COMPLEX NETWORKS & THEIR APPLICATIONS*
2. T. Herlau, M.N. Schmidt, M. Mørup, 2022, Bayesian dropout, *Procedia Computer Science* 201, 771-776
3. A. Mohebbi, A. R. Johansen, N. Hansen, P. E. Christensen, J. M. Tarp, M. L. Jensen, H. Bengtsson, M. Mørup, 2020, Short term blood glucose prediction based on continuous glucose monitoring data, 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)
4. M. Korzepa, M. K. Petersen, J.E. Larsen, **M. Mørup**, 2020, July. Simulation environment for guiding the design of contextual personalization systems in the context of hearing aids. In Adjunct Publication of the 28th ACM Conference on User Modeling, Adaptation and Personalization (pp. 293-298).
5. J.L. Hinrich, **M. Mørup**, 2019, Probabilistic Tensor Train Decomposition, 27th European Signal Processing Conference (EUSIPCO), 1-5
6. A. Mohebbi, J. M. Tarp, M. L. Jensen, S. Puthusserypady, E. Hachmann-Nielsen, H. Bengtsson, **M. Mørup**, 2019, Fast assessment of glycemic control based on continuous glucose monitoring data, 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)
7. K. J. Albers, M. N. Schmidt, **M. Mørup**, M. Litong-Palima, R. Bonnevie, F. K. Glückstad, 2018, Understanding Mindsets Across Markets, Internationally: A Public-private Innovation Project for Developing a Tourist Data Analytic Platform, 2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC)
8. J. L. Hinrich, S. F.V. Nielsen, K. H. Madsen, **M. Mørup**, 2018, Variational Bayesian Partially Observed Non-negative Tensor Factorization, *IEEE 28th International Workshop on Machine Learning for Signal Processing (MLSP)* (received a best paper award).
9. S. F. V. Nielsen, D. Vidaurre, K. H. Madsen, M. N. Schmidt, **M. Mørup**, 2018, Testing group differences in state transition structure of dynamic functional connectivity models, *International Workshop on Pattern Recognition in Neuroimaging (PRNI)*, 1-4.
10. S. F. V. Nielsen, Y. Levin-Schwartz, D. Vidaurre, T. Adali, V. D. Calhoun, K. H. Madsen, L. K. Hansen, **M. Mørup**, 2018, Evaluating Models of Dynamic Functional Connectivity Using Predictive Classification Accuracy, *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pp. 2566-2570.
11. R. Bonnevie, M. N. Schmidt and **M. Mørup**, 2017, Difference-of-Convex optimization for variational kl-corrected inference in dirichlet process mixtures, *IEEE 27th International Workshop on Machine Learning for Signal Processing (MLSP)*, Tokyo, 2017, pp. 1-6.
12. A. Mohebbi, T. B. Aradóttir, A. R. Johansen, H. Bengtsson, M. Fraccaro, **M. Mørup**, 2017, A deep learning approach to adherence detection for type 2 diabetics, *Engineering in Medicine and Biology Society (EMBC), 2017 39th Annual International Conference of the IEEE*.

13. R. Røge, K.S. Ambrosen, K.J. Albers, C.T. Eriksen, M.G. Liptrot, M.N. Schmidt, K.H.Madsen, **M. Mørup**, 2017, Whole brain functional connectivity predicted by indirect structural connections, Pattern Recognition in Neuroimaging (PRNI), 2017 International Workshop on.
14. S. F. V. Nielsen, K.H. Madsen, M.N. Schmidt, **M. Mørup**, 2017, Modeling dynamic functional connectivity using a wishart mixture model, Pattern Recognition in Neuroimaging (PRNI), 2017 International Workshop on.
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16. T. Herlau, ; M. N. Schmidt, **M. Mørup**, 2016, Completely random measures for modelling block-structured sparse networks, Neural Information Processing Systems (NIPS2016).
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Patents

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