

## List of publications

---

### Refereed journal publications

- [1] Søren Føns Nielsen, Francesco Da Ros, Mikkel N. Schmidt, and Darko Zibar. “End-to-End Learning of Transmitter and Receiver Filters in Bandwidth Limited Fiber Optic Communication Systems”. In: *Journal of Lightwave Technology* (2025). DOI: 10.1109/JLT.2025.3528542.
- [2] François Cornet, Bardi Benediktsson, Bjarke Hastrup, Mikkel N. Schmidt, and Arghya Bhowmik. “OM-Diff: inverse-design of organometallic catalysts with guided equivariant denoising diffusion”. In: *Digital Discovery* (2024). DOI: 10.1039/D4DD00099D.
- [3] Philip J. H. Jørgensen, Søren F. Nielsen, Jesper L. Hinrich, Mikkel N. Schmidt, Kristoffer H. Madsen, and Morten Mørup. “Probabilistic PARAFAC2”. In: *Entropy* (2024). DOI: 10.3390/e26080697.
- [4] Bo Li, Yasin Esfandiari, Mikkel N. Schmidt, Tommy S. Alstrøm, and Sebastian U. Stich. “Synthetic data shuffling accelerates the convergence of federated learning under data heterogeneity”. In: *Transactions on Machine Learning Research (TMLR)* (2024).
- [5] Jonas Busk, Mikkel N. Schmidt, Ole Winther, Tejs Vegge, and Peter Bjørn Jørgensen. “Graph neural network interatomic potential ensembles with calibrated aleatoric and epistemic uncertainty on energy and forces”. In: *Physical Chemistry Chemical Physics* (2023). DOI: 10.1039/D3CP02143B.
- [6] David Frich Hansen, Tommy Sonne Alstrøm, and Mikkel N. Schmidt. “Probabilistic signal estimation for vibrational spectroscopy with a flexible non-stationary Gaussian process baseline model”. In: *Chemometrics and Intelligent Laboratory Systems* (2023). DOI: 10.1016/j.chemolab.2023.104974.
- [7] Bo li, Giulia Zappalá, Elodie Dumont, Anja Boisen, Tomas Rindzevicius, Mikkel N. Schmidt, and Tommy S. Alstrøm. “Nitroaromatic explosives detection and quantification using attention-based transformer on surface-enhanced Raman spectroscopy maps”. In: *Analyst* (2023). DOI: 10.1039/D3AN00446E.
- [8] Muralikrishnan Srinivasan, Jinxiang Song, Alexander Grabowski, Krzysztof Szczerba, Holger K. Iversen, Mikkel N. Schmidt, Darko Zibar, Jochen Schröder, Anders Larsson, Christian Häger, and Henk Wymeersch. “End-to-End Learning for VCSEL-based Optical Interconnects: State-of-the-Art, Challenges, and Opportunities”. In: *Journal of Lightwave Technology* 41 (11 2023). DOI: 10.1109/JLT.2023.3251660. URL: <http://arxiv.org/abs/2211.14481>.
- [9] Kristoffer Jon Albers, Matthew G. Liptrot, Karen Sandø Ambrosen, Rasmus Røge, Tue Herlau, Kasper Winther Andersen, Hartwig R. Siebner, Lars Kai Hansen, Tim B. Dyrby, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Uncovering Cortical Units of Processing from Multi-Layered Connectomes”. In: *Frontiers in Neuroscience* (2022). DOI: 10.3389/fnins.2022.836259.
- [10] Bo li, Mikkel N. Schmidt, and Tommy S. Alstrøm. “Raman Spectrum Matching with Contrastive Representation Learning”. In: *Analyst* (2022). DOI: 10.1039/D2AN00403H.
- [11] Kristoffer Jon Albers, Karen S. Ambrosen, Matthew G. Liptrot, Tim B. Dyrby, Mikkel N. Schmidt, and Morten Mørup. “Using connectomics for predictive assessment of brain parcellations”. In: *NeuroImage* 238 (Sept. 2021). DOI: 10.1016/j.neuroimage.2021.118170.
- [12] Rasmus Bonnevie and Mikkel N. Schmidt. “Matrix product states for inference in discrete probabilistic models”. In: *Journal of machine learning research* 22 (2021). URL: <http://jmlr.org/papers/v22/18-431.html>.
- [13] Jonas Busk, Peter Bjørn Jørgensen, Arghya Bhowmik, Mikkel N. Schmidt, Ole Winther, and Tejs Vegge. “Calibrated uncertainty for molecular property prediction using ensembles of message passing neural networks”. In: *Machine Learning: Science and Technology* 3.1 (2021). DOI: 10.1088/2632-2153/ac3eb3.
- [14] Mikkel N. Schmidt, Daniel Seddig, Eldad Davidov, Morten Mørup, Jan Michael Bauer, and Fumiko Kano Glückstad. “Latent Profile Analysis of Human Values: What is the Optimal Number of Clusters?” In: *Methodology* 17 (2 2021). DOI: 10.5964/meth.5479.
- [15] Kristoffer Jon Albers, Morten Mørup, Mikkel N. Schmidt, and Fumiko K. Glückstad. “Predictive evaluation of human value segmentations”. In: *Journal of Mathematical Sociology* (2020). DOI: 10.1080/0022250X.2020.1811277.
- [16] Fumiko K. Glückstad, Mikkel N. Schmidt, and Morten Mørup. “Testing a model of destination image formation: Application of Bayesian relational modeling and fsQCA”. In: *Journal of Business Research* 120 (Nov. 2020), pp. 351–363. DOI: 10.1016/j.jbusres.2019.10.014.
- [17] Karen S. Ambrosen, Simon F. Eskildsen, Max Hinne, Kristine Krug, Henrik Lundell, Mikkel N. Schmidt, Marcel A. J. van Gerven, Morten Mørup, and Tim B. Dyrby. “Validation of structural brain connectivity networks: The impact of scanning parameters”. In: *NeuroImage* 204 (2019). DOI: 10.1016/j.neuroimage.2019.116207.
- [18] Kunal Ghosh, Annika Stuke, Milica Todorović, Peter Bjørn Jørgensen, Mikkel N. Schmidt, Aki Vehtari, and Patrick Rinke. “Deep Learning Spectroscopy: Neural Networks for Molecular Excitation Spectra”. In: *Advanced Science* 6 (9 May 2019). DOI: 10.1002/advs.201801367.
- [19] Peter Bjørn Jørgensen, Estefanía Garijo del Río, Mikkel N. Schmidt, and Karsten Wedel Jacobsen. “Materials property prediction using symmetry-labeled graphs as atomic-position independent descriptors”. In: *Physical Review B* 100.104114 (10 2019). DOI: 10.1103/PhysRevB.100.104114.

- [20] Mikkel N. Schmidt and Morten Mørup. “Efficient computation for Bayesian comparison of two proportions”. In: *Statistics & probability letters* 145 (Feb. 2019), pp. 57–62. DOI: 10.1016/j.spl.2018.08.011.
- [21] Peter Bjørn Jørgensen, Murat Mesta, Suranjan Shil, Juan Maria García Lastra, Karsten Wedel Jacobsen, Kristian Sommer Thygesen, and Mikkel N. Schmidt. “Machine learning-based screening of complex molecules for polymer solar cells”. In: *The Journal of Chemical Physics* 148.241735 (2018). DOI: 10.1063/1.5023563.
- [22] Fumiko K. Glückstad, Mikkel N. Schmidt, and Morten Mørup. “Examination of Heterogeneous Societies: Identifying subpopulations by contrasting cultures”. In: *Journal of Cross-Cultural Psychology* 48.1 (2017). DOI: doi:10.1177/0022022116672346.
- [23] Peter B. Jørgensen, Mikkel N. Schmidt, and Ole Winther. “Deep Generative Models for Molecular Science”. In: *Molecular Informatics* 37.1–2 (Feb. 2017). DOI: 10.1002/minf.201700133.
- [24] Søren Føns Vind Nielsen, Mikkel N. Schmidt, Kristoffer Hougaard Madsen, and Morten Mørup. “Predictive assessment of models for dynamic functional connectivity”. In: *NeuroImage* (2017). DOI: 10.1016/j.neuroimage.2017.12.084.
- [25] Rasmus E. Røge, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Infinite von Mises-Fisher mixture modeling of whole-brain fMRI data”. In: *Neural Computation* 29.10 (Oct. 2017), pp. 2712–2741. DOI: 10.1162/neco\_a\_01000.
- [26] Kasper B. Frøhling, Tommy S. Alstrøm, Michael Bache, Michael S. Schmidt, Mikkel N. Schmidt, Jan larsen, Mogens H. Jakobsen, and Anja Boisen. “Surface-enhanced Raman spectroscopic study of DNA and 6-mercapto-1-hexanol interactions using large area mapping”. In: *Vibrational Spectroscopy* 86 (Sept. 2016), pp. 331–336. DOI: doi:10.1016/j.vibspec.2016.08.005.
- [27] Kasper Winther Andersen, Kristoffer H. Madsen, Hartwig Roman Siebner, Mikkel N. Schmidt, Morten Mørup, and Lars Kai Hansen. “Non-parametric Bayesian graph models reveal community structure in resting state fMRI”. In: *NeuroImage* (2014), pp. 301–15. DOI: 10.1016/j.neuroimage.2014.05.083.
- [28] Fumiko K. Glückstad, Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Cross-categorization of legal concepts across boundaries of legal systems”. In: *Artificial Intelligence and Law* (2014). DOI: 10.1007/s10506-013-9150-2.
- [29] Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Infinite-degree-corrected stochastic block model”. In: *Physical Review E* 90.032819 (2014). DOI: 10.1103/PhysRevE.90.032819.
- [30] Mikkel N. Schmidt and Morten Mørup. “Non-parametric Bayesian modeling of complex networks. An introduction”. In: *IEEE Signal Processing Magazine* 30.3 (May 2013), pp. 110–128. DOI: 10.1109/MSP.2012.2235191.
- [31] Darko Zibar, Ole Winther, Niccolo Franceschi, Robert Borkowski, Antonio Caballero, Valeria Arlunno, Mikkel N. Schmidt, Neil Guerrero Gonzales, Bangning Mao, Yabin Ye, Knud J. Larsen, and Idelfonso Tafur Monroy. “Nonlinear impairment compensation using expectation maximization for dispersion managed and unmanaged PDM 16-QAM transmission”. In: *Optics Express* 20.26 (2013), B181–B196. DOI: 10.1364/OE.20.00B181.
- [32] Morten Mørup and Mikkel N. Schmidt. “Bayesian community detection”. In: *Neural Computation* 24.9 (2012), pp. 2434–56. DOI: 10.1162/NECO\_a\_00314.
- [33] Morten Arngren, Mikkel N. Schmidt, and Jan Larsen. “Unmixing of hyperspectral images using Bayesian nonnegative matrix factorization with volume prior”. In: *Journal of Signal Processing Systems* 65.3 (2010), pp. 479–496. DOI: 10.1007/s11265-010-0533-2.
- [34] Mikkel N. Schmidt and Hans Laurberg. “Non-negative matrix factorization with Gaussian process priors”. In: *Computational Intelligence and Neuroscience* (2008). DOI: 10.1155/\2008/361705.

---

### Refereed conference publications

- [35] François Cornet, Grigory Bartosh, Mikkel N. Schmidt, and Christian A. Naesseth. “Equivariant neural diffusion for molecule generation”. In: *Neural Information Processing (NeurIPS)*. 2024. URL: <https://openreview.net/forum?id=40pE5pFhWl>.
- [36] François Cornet, Pratham Deshmukh, Bardi Benediktsson, Mikkel N. Schmidt, and Arghya Bhowmik. “Equivariant conditional diffusion model for exploring the chemical space around Vaska’s complex”. In: *AI for Accelerated Materials Design, Neurips Workshop on (AIM4MAT)*. 2024. URL: <https://openreview.net/forum?id=Ymnbjhd4Q>.
- [37] Bo Li, Xiaowen Jiang, Mikkel N. Schmidt, Tommy S. Alstrøm, and Sebastian U. Stich. “An improved analysis of per-sample and per-update clipping in federated learning”. In: *Learning Representations, International Conference on (ICLR)*. 2024. URL: <https://iclr.cc/virtual/2024/poster/19208>.
- [38] Anna Emilie J. Wedenborg, Michael Alexander Harborg, Andreas Bigom, Oliver Elmgreen, Marcus Presutti, Andreas Raskov, Fumiko Kano Glückstad, Mikkel N. Schmidt, and Morten Mørup. “Modeling human responses by ordinal archetypal analysis”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2024. DOI: 10.1109/MLSP58920.2024.10734804.
- [39] Thea Brusch, Mikkel N. Schmidt, and Tommy S. Alstrøm. “Multi-view self-supervised learning for multivariate variable-channel time series”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2023. DOI: 10.1109/MLSP55844.2023.10285993.

- [40] François R. J. Cornet, Bardi Benediktsson, Bjarke Hastrup, Arghya Bhowmik, and Mikkel N. Schmidt. “Inverse-design of organometallic catalysts with guided equivariant diffusion”. In: *ELLIS Advancing Molecular Machine Learning Workshop (ML4Molecules) and AI for Accelerated Materials Design, NeurIPS Workshop (AI4MAT)*. 2023.
- [41] David Frich Hansen, Tommy S. Alstrøm, and Mikkel N. Schmidt. “Amortized variational peak fitting for spectroscopic data”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2023. DOI: 10.1109/MLSP55844.2023.10285981.
- [42] Peter Bjørn Jørgensen, Jonas Busk, Ole Winther, and Mikkel N. Schmidt. “Coherent Energy and Force Uncertainty in Deep Learning Force Fields”. In: *ELLIS Advancing Molecular Machine Learning Workshop (ML4Molecules)*. 2023.
- [43] Bo Li, Mikkel N. Schmidt, Tommy S. Alstrøm, and Sebastian U. Stich. “On the Effectiveness of Partial Variance Reduction in Federated Learning With Heterogeneous Data”. In: *Computer Vision and Pattern Recognition Conference, The IEEE/CVF (CVPR)*. 2023, pp. 3964–3973. URL: [https://openaccess.thecvf.com/content/CVPR2023/html/Li\\_On\\_the\\_Effectiveness\\_of\\_Partial\\_Variance\\_Reduction\\_in\\_Federated\\_Learning\\_CVPR\\_2023\\_paper.html](https://openaccess.thecvf.com/content/CVPR2023/html/Li_On_the_Effectiveness_of_Partial_Variance_Reduction_in_Federated_Learning_CVPR_2023_paper.html).
- [44] Anders S. Olsen, Emil Ortvald, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Angular central Gaussian and Watson mixture models for assessing dynamic functional brain connectivity during a motor task”. In: *Unraveling the Brain, Data Science and Learning Workshop (DSLW), ICASSP Satellite*. 2023. DOI: 10.1109/ICASSPW59220.2023.10193021.
- [45] Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Bayesian dropout”. In: *Workshop on Statistical Methods and Artificial Intelligence, International Workshop on (IWSMAI), Procedia Computer Science, vol 201*. 2022, pp. 771–776. DOI: 10.1016/j.procs.2022.03.105.
- [46] Rasmus Larsen and Mikkel N. Schmidt. “Programmatic policy extraction by iterative local search”. In: *Approaches and Applications of Inductive Programming, International Workshop on (AAIP), Lecture Notes in Computer Science, vol 13191*. 2021. DOI: 10.1007/978-3-030-97454-1\_11.
- [47] Mikkel N. Schmidt, Tommy S. Alstrøm, Marcus Svendstorp, and Jan Larsen. “Peak detection and baseline correction using a convolutional neural network”. In: *Acoustics, speech and signal processing, IEEE international conference on (ICASSP)*. 2019. DOI: 10.1109/ICASSP.2019.8682311.
- [48] Maximillian F. Vording, Peter O. Okeyo, Juan J. R. Guillamon, Peter E. Larsen, Mikkel N. Schmidt, and Tommy S. Alstrøm. “A Bayesian generative model with Gaussian process priors for termomechanical analysis of micro-resonators”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2019. DOI: 10.1109/MLSP.2019.8918876.
- [49] Kristoffer Jon Albers, Mikkel N. Schmidt, Morten Mørup, Marisciel Litong-Palima, Rasmus Bonnevie, and Fumiko Kano Glückstad. “Understanding Mindsets Across Markets, Internationally: A Public-Private Innovation Project for Developing a Tourist Data Analytic Platform”. In: *Computer Software and Applications Conference (COMPSAC)*. July 2018, pp. 159–164. DOI: 10.1109/COMPSAC.2018.10221.
- [50] Peter Bjørn Jørgensen, Karsten Wedel Jacobsen, and Mikkel N. Schmidt. “Neural Message Passing with Edge Updates for Predicting Properties of Molecules and Materials”. In: *Machine Learning for Molecules and Materials, NIPS workshop on*. 2018.
- [51] Søren F. V. Nielsen, Diego Vidaurre, Mikkel N. Schmidt, Kristoffer H. Madsen, and Morten Mørup. “Testing group differences in state transition structure of dynamic functional connectivity models”. In: *Pattern Recognition in NeuroImaging (PRNI)*. 2018. DOI: 10.1109/PRNI.2018.8423966.
- [52] Tommy S. Alstrøm, Mikkel N. Schmidt, Tomas Rindzevicius, Anja Boisen, and Jan Larsen. “A pseudo-Voigt component model for high-resolution recovery of constituent spectra in raman spectroscopy”. In: *Acoustics, speech and signal processing, IEEE international conference on (ICASSP)*. 2017. DOI: 10.1109/ICASSP.2017.7952570.
- [53] Rasmus Bonnevie, Morten Mørup, and Mikkel N. Schmidt. “Difference-Of-Convex Optimization For Variational KL-Corrected Inference In Dirichlet Process Mixtures”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2017. DOI: 10.1109/MLSP.2017.8168159.
- [54] Jesper L. Hinrich, Søren F. V. Nielsen, Nicolai A. B. Riis, Casper T. Eriksen, Jacob Frøsig, Marco D. F. Kristensen, Mikkel N. Schmidt, Kristoffer H. Madsen, and Morten Mørup. “Scalable group level probabilistic sparse factor analysis”. In: *Acoustics, speech and signal processing, IEEE international conference on (ICASSP)*. 2017. DOI: 10.1109/ICASSP.2017.7952570.
- [55] Søren F. V. Nielsen, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Modeling dynamic functional connectivity using a wishart mixture model”. In: *Pattern Recognition in NeuroImaging (PRNI)*. 2017. DOI: 10.1109/PRNI.2017.7981505.
- [56] Rasmus Røge, Karen Sandø Ambrosen, Kristoffer Jon Albers, Casper Tabassum Eriksen, Matthew George Lip-trot, Mikkel N. Schmidt, Kristoffer Hougaard Madsen, and Morten Mørup. “Whole brain functional connectivity predicted by indirect structural connections”. In: *Pattern Recognition in NeuroImaging (PRNI)*. 2017. DOI: 10.1109/PRNI.2017.7981496.

- [57] Kristoffer J. Albers, Morten Mørup, and Mikkel N. Schmidt. “The influence of hyper-parameters in the infinite relational model”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2016. DOI: 10.1109/MLSP.2016.7738908.
- [58] Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Completely random measures for modelling block-structured sparse networks”. In: *Advances in neural information processing (NIPS)*. 2016.
- [59] Philip H. Jørgensen, Morten Mørup, Mikkel N. Schmidt, and Tue Herlau. “Bayesian latent feature modeling for modeling bipartite networks with overlapping groups”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2016. DOI: 10.1109/MLSP.2016.7738845.
- [60] Rasmus E. Røge, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Unsupervised segmentation of task activated regions in fMRI”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2015. DOI: 10.1109/MLSP.2015.7324384.
- [61] Mikkel N. Schmidt and Kristoffer Jon Albers. “Numerical approximations for speeding up MCMC inference in the infinite relational model”. In: *European Signal Processing Conference (EUSIPCO)*. 2015. DOI: 10.1109/EUSIPCO.2015.7362891.
- [62] Tommy S. Alstrøm, Kasper B. Frøhling, Jan Larsen, Mikkel N. Schmidt, Michael Bache, Michael S. Schmidt, Mogens H. Jakobsen, and Anja Boisen. “Improving the Robustness of Surface Enhanced Raman Spectroscopy based Sensors by Bayesian Non-negative Matrix Factorization”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2014. DOI: 10.1109/MLSP.2014.6958925.
- [63] Karen Sandø Ambrosen, Kristoffer Jon Albers, Tim Dyrby, Mikkel N. Schmidt, and Morten Mørup. “Nonparametric Bayesian Clustering of Structural Whole Brain Connectivity in Full Resolution”. In: *Pattern Recognition in NeuroImaging (PRNI)*. 2014. DOI: 10.1109/PRNI.2014.6858507.
- [64] Morten Mørup, Fumiko K. Glückstad, Tue Herlau, and Mikkel N. Schmidt. “Nonparametric Statistical Structuring of Knowledge Systems using Binary Feature Matches”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2014. DOI: 10.1109/MLSP.2014.6958905.
- [65] Mikkel N. Schmidt, Tue Herlau, and Morten Mørup. “Discovering hierarchical structure in normal relational data”. In: *Cognitive Information Processing (CIP)*. 2014. DOI: 10.1109/CIP.2014.6844498.
- [66] Kristoffer Jon Albers, Andreas Leon Aagaard Moth, Morten Mørup, and Mikkel N. Schmidt. “Large scale inference in the infinite relational model: Gibbs sampling is not enough”. In: *Machine Learning for Signal Processing, IEEE International Workshop on (MLSP)*. 2013. DOI: 10.1109/MLSP.2013.6661904.
- [67] Karen Sandø Ambrosen, Tue Herlau, Tim Dyrby, Mikkel N. Schmidt, and Morten Mørup. “Comparing Structural Brain Connectivity by the Infinite Relational Model”. In: *Pattern Recognition in NeuroImaging (PRNI)*. 2013, pp. 50–53. DOI: 10.1109/PRNI.2013.22.
- [68] Fumiko K. Glückstad, Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Analysis of Conceptualization Patterns across Groups of People”. In: *Technologies and Applications of Artificial Intelligence, Conference on (TAAI)*. 2013. DOI: 10.1109/TAAI.2013.75.
- [69] Fumiko K. Glückstad, Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Analysis of Subjective Conceptualizations Towards Collective Conceptual Modelling”. In: *Japanese Society for Artificial Intelligence, Conference of the (JSAI)*. 2013.
- [70] Fumiko K. Glückstad, Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Unsupervised Knowledge Structuring: Application of Infinite Relational Models to the FCA Visualization”. In: *Signal Image Technology and Internet based Systems, International Conference on (SITIS)*. 2013, pp. 233–40. DOI: 10.1109/SITIS.2013.48.
- [71] Tue Herlau, Morten Mørup, and Mikkel N. Schmidt. “Modeling Temporal Evolution and Multiscale Structure in Networks”, *Machine Learning, International Conference on (ICML)*. In: ed. by Sanjoy Dasgupta and David McAllester. Vol. 28. Proceedings of Machine Learning Research 3. Atlanta, Georgia, USA: PMLR, June 2013, pp. 960–968.
- [72] Tommy S. Alstrøm, Bjørn S. Jensen, Mikkel N. Schmidt, Natalie V. Kostesha, and Jan Larsen. “Hausdorff and Hellinger for colorimetric sensor array classification”. In: *Machine Learning for Signal Processing, IEEE International Workshop on (MLSP)*. 2012. DOI: 10.1109/MLSP.2012.6349724.
- [73] Tue Herlau, Morten Mørup, Mikkel N. Schmidt, and Lars Kai Hansen. “Detecting hierarchical structure in networks”. In: *Cognitive Information Processing (CIP)*. 2012. DOI: 10.1109/CIP.2012.6232913.
- [74] Tue Herlau, Morten Mørup, Mikkel N. Schmidt, and Lars Kai Hansen. “Modeling dense relational data”. In: *Machine Learning for Signal Processing, IEEE International Workshop on (MLSP)*. 2012. DOI: 10.1109/MLSP.2012.6349747.
- [75] Mikkel N. Schmidt, Stephen Schwartz, and Jan Larsen. “Interactive 3D audio: Enhancing awareness of details in immersive soundscapes?” In: *133rd Convention of the Audio Engineering Society*. 2012. URL: <http://www.aes.org/e-lib/browse.cfm?elib=16522>.
- [76] Darko Zibar, Ole Winther, Niccolo Franceschi, Robert Borkowski, tonio Caballero, Mikkel N. Schmidt Valeria Arlunno, Neil Guerrero Gonzales, Bangning Mao, Knud J. Larsen, and Idelfonso Tafur Monroy. “Nonlinear Impairment Compensation Using Expectation Maximization for PDM 16-QAM Systems”. In: *European Conference on Optical Communications (ECOC)*. 2012. DOI: 10.1364/OE.20.00B18.

- [77] Morten Mørup and Mikkel N. Schmidt. “Transformation invariant sparse coding”. In: *Machine Learning for Signal Processing, IEEE International Workshop on (MLSP)*. 2011. DOI: 10.1109/MLSP.2011.6064547.
- [78] Morten Mørup, Mikkel N. Schmidt, and Lars Kai Hansen. “Infinite multiple membership relational modeling for complex networks”. In: *Machine Learning for Signal Processing, IEEE International Workshop on (MLSP)*. 2011. DOI: 10.1109/MLSP.2011.6064546.
- [79] Mikkel N. Schmidt and Morten Mørup. “Infinite non-negative matrix factorization”. In: *European Signal Processing Conference (EUSIPCO)*. 2010.
- [80] Morten Arngren, Mikkel N. Schmidt, and Jan Larsen. “Bayesian nonnegative matrix factorization with volume prior for unmixing of hyperspectral images”. In: *Machine Learning for Signal Processing, IEEE Workshop on (MLSP)*. 2009. DOI: 10.1109/MLSP.2009.5306262.
- [81] Mikkel N. Schmidt. “Function factorization using warped Gaussian processes”. In: *Machine Learning, International Conference on (ICML)*. 2009.
- [82] Mikkel N. Schmidt. “Linearly constrained matrix factorization for blind source separation”. In: *Advances in neural information processing (NIPS)*. 2009.
- [83] Mikkel N. Schmidt and Shakir Mohamed. “Probabilistic non-negative tensor factorization using Markov chain Monte Carlo”. In: *European Signal Processing Conference (EUSIPCO)*. 2009.
- [84] Mikkel N. Schmidt, Ole Winther, and Lars Kai Hansen. “Bayesian non-negative matrix factorization”. In: *Independent Component Analysis and Signal Separation, International Conference on (ICA), Springer Lecture Notes in Computer Science, Vol. 5441*. 2009, pp. 540–547. DOI: 10.1007/978-3-642-00599-2\_68.
- [85] Hans Laurberg, Mikkel N. Schmidt, Mads G. Christensen, and Søren H. Jensen. “Structured non-negative matrix factorization with sparsity patterns”. In: *Signals, Systems and Computers, Asilomar Conference on*. 2008. DOI: 10.1109/ACSSC.2008.5074714.
- [86] Mikkel N. Schmidt and Jan Larsen. “Reduction of Non-stationary Noise using a Non-negative Latent Variable Decomposition”. In: *Machine Learning for Signal Processing, IEEE Workshop on (MLSP)*. 2008, pp. 486–491. DOI: 10.1109/MLSP.2008.4685528.
- [87] Mikkel N. Schmidt, Jan Larsen, and Fu-Tien Hsiao. “Wind Noise Reduction using Non-negative Sparse Coding”. In: *Machine Learning for Signal Processing, IEEE International Workshop on, (MLSP)*. 2007, pp. 431–436. DOI: 10.1109/MLSP.2007.4414345.
- [88] Mikkel N. Schmidt and Rasmus K. Olsson. “Linear Regression on Sparse Features for Single-Channel Speech Separation”. In: *Applications of Signal Processing to Audio and Acoustics, IEEE Workshop on (WASPAA)*. 2007, pp. 26–29. DOI: 10.1109/ASPAA.2007.4393010.
- [89] Mikkel N. Schmidt and Morten Mørup. “Non-negative Matrix Factor 2-D Deconvolution for Blind Single Channel Source Separation”. In: *Independent Component Analysis, International Conference on (ICA), Springer Lecture Notes in Computer Science, Vol.3889*. 2006, pp. 700–707. DOI: 10.1007/11679363\_87.
- [90] Mikkel N. Schmidt and Rasmus K. Olsson. “Single-Channel Speech Separation using Sparse Non-Negative Matrix Factorization”. In: *International Conference on Spoken Language Processing, (Interspeech)*. 2006, pp. 1652–55.

---

#### Refereed abstracts and workshop contributions

- [91] Philip H. Jørgensen, Søren F. V. Nielsen, Jesper L. Hinrich, Mikkel N. Schmidt, Kristoffer H. Madsen, and Morten Mørup. “Analysis of Chromatographic Data using the Probabilistic PARAFAC2”. In: *Machine Learning and the Physical Sciences, NeurIPS Workshop on*. 2019.
- [92] Fumiko K. Glückstad, Mikkel N. Schmidt, and Morten Mørup. “Testing a model of destination image formation: Application of nonparametric Bayesian relational modeling to destination image analysis”. In: *Global Marketing Conference at Tokyo*. July 2018, pp. 63–64. DOI: 10.15444/GMC2018.01.07.02.
- [93] Kasper B. Frøhling, Tommy S. Alstrøm, Michael Bache, Michael S. Schmidt, Mikkel N. Schmidt, Jan larsen, Mogens H. Jakobsen, and Anja Boisen. “Statistical analysis of large areas of Raman mapped DNA functionalized gold coated silicon nanopillar SERS substrates”. In: *Advanced Vibrational Spectroscopy, International Conference on (ICAVS)*. 2015.
- [94] Søren Føns Vind Nielsen, Kristoffer Hougaard Madsen, Rasmus Røge, Mikkel N. Schmidt, and Morten Mørup. “Nonparametric modeling of dynamic functional connectivity in fMRI data”. In: *Machine Learning and Interpretation in Neuroimaging, NIPS Workshop on (MLINI)*. 2015.
- [95] Kasper Winther Andersen, Kristoffer H. Madsen, Hartwig Roman Siebner, Mikkel N. Schmidt, Morten Mørup, and Lars Kai Hansen. “Community structure in resting state complex networks”. In: *Human Brain Mapping*. 2014.
- [96] Tue Herlau, Morten Mørup, and Mikkel N. Schmidt. “Temporally Evolving Hierarchies in Networks”. In: *NetSci*. 2013.
- [97] Kasper Winther Andersen, Tue Herlau, Morten Mørup, Mikkel N. Schmidt, Mark Lyksborg Kristoffer H. Madsen, Tim Dyrby, Hartwig Siebner, and Lars Kai Hansen. “Joint Modelling of Structural and Functional Brain Networks”. In: *NIPS workshop on Machine Learning and Interpretation in Neuroimaging*. 2012.



- [98] Sune Lehmann, Morten Mørup, and Mikkel N. Schmidt. “A Bayesian Generative Model for Pervasive Overlap”. In: *NetSci*. 2012.
- [99] Morten Mørup and Mikkel N. Schmidt. “Efficient inference in the infinite multiple membership relational model”. In: *NIPS workshop on Bayesian nonparametric: Hope or hype*. 2011.
- [100] Mikkel N. Schmidt, Morten Mørup, and Tue Herlau. “Hierarchical models of complex networks”. In: *NIPS workshop on Bayesian nonparametric: Hope or hype*. 2011.
- [101] Morten Mørup, Mikkel N. Schmidt, and Lars Kai Hansen. “Infinite multiple membership relational modeling for complex networks”. In: *NIPS workshop on Networks across disciplines in theory and applications*. 2010.
- [102] Mikkel N. Schmidt and Morten Mørup. “Reversible jump MCMC for Bayesian NMF”. In: *NIPS workshop on Monte Carlo methods for Bayesian inference in modern day applications*. 2010.

---

#### Theses

- [103] Mikkel N. Schmidt. “Single-channel source separation using non-negative matrix factorization”. PhD thesis. Technical University of Denmark, 2008.
- [104] Mikkel N. Schmidt and Jens Seiersen. “Perceptual unitary ESPRIT algorithm”. MA thesis. Aalborg University, 2003.

---

#### Technical reports

- [105] Morten Mørup and Mikkel N. Schmidt. “Sparse Non-negative Matrix Factor 2-D Deconvolution”.
- [106] Morten Mørup and Mikkel N. Schmidt. “Sparse Non-negative Tensor 2D Deconvolution (SNTF2D) for multi channel time-frequency analysis”.
- [107] Mikkel N. Schmidt. “Speech Separation using Non-negative Features and Sparse Non-negative Matrix Factorization 2007”.
- [108] Mikkel N. Schmidt and Morten Mørup. “Sparse Non-negative Matrix Factor 2-D Deconvolution for Automatic Transcription of Polyphonic Music”.
- [109] Mikkel N. Schmidt and Rasmus K. Olsson. “Feature Space Reconstruction for Single-Channel Speech Separation”.

---

#### Publications in preparation

- [110] Kristoffer J. Albers, Morten Mørup, and Mikkel N. Schmidt. “Local modes in the posterior distribution of Dirichlet process mixture models”. 2017.
- [111] Kristoffer Jon Albers, Karen Sandø Ambrossen, Rasmus Røge, Matthew G. Liptrot, Tue Herlau, Kasper Winther Andersen, Hartwig R. Siebner, Lars Kai Hansen, Tim B. Dyrby, Kristoffer H. Madsen, Mikkel N. Schmidt, and Morten Mørup. “Functional Whole-Brain Parcellation Improved by the Inclusion of Structural Connectivity”. 2017.
- [112] Kristoffer Jon Albers, Morten Mørup, Mikkel N. Schmidt, and Fumiko K. Glückstad. “Predictive evaluation of human value segmentations”. 2017.
- [113] Tue Herlau, Morten Mørup, Yee Whye Teh, and Mikkel N. Schmidt. “Adaptive Reconfiguration Moves for Efficient Markov Chain Sampling”. 2014. URL: <http://arxiv.org/abs/1406.0071>.
- [114] Tue Herlau, Mikkel N. Schmidt, and Morten Mørup. “Bayesian Dropout”. 2013. URL: <http://arxiv.org/abs/1508.02905>.
- [115] Mikkel N. Schmidt, Morten Mørup, and Tue Herlau. “Nonparametric Bayesian models of hierarchical structure in complex networks”. 2012. URL: <http://arxiv.org/abs/1311.1033>.