

Curriculum Vitae

Florian Frommlet

Born on the 11th February 1972 in Bad Aussee



School education:

09/1978 – 06/1982 Volksschule in Bad Ischl
09/1982 – 06/1990 Gymnasium in Bad Ischl
Matura: 11th June 1990 (with excellent success)

University:

10/1990 Student of Technical Mathematics at the TU Vienna
10/1992 1. Diploma (with excellent success)
06/1995 2. Diploma (with excellent success)

Alternative Service:

10/1995 – 08/1996 Alternative Service in Vienna

PhD:

10/1996 PhD Student at the TU Berlin
04/1997 – 07/1998 Scientific Associate at the TU Berlin
08/1998 – 07/1999 TMR fellowship at the TU Berlin
09/1999 – 08/2000 TMR fellowship at the University of Granada, Spain
12/2000 Conferral of a doctorate at the TU Berlin

Post Doc:

01/2002 – 06/2004 University Assistant at the Department of Medical Statistics, University Vienna
07/2004 – 11/2010 University Assistant at the Department of Statistics and Decision Support, University Vienna
01/2007 – 05/2007 Visiting Assistant Professor at Purdue University, USA
12/2010 – 08/2014 Senior PostDoc and Principle Investigator of WWTF grant MA09-007a
10/2012 – 03/2013 Professor (W2) at LMU Munich, Germany
08/2013 – 12/2017 University Assistant at Section of Medical Statistics, Medical University Vienna
Since 01/2018 Associate Professor at Section of Medical Statistics, Medical University Vienna

Habilitation in Statistics:

01/2012 Department of Statistics, University Vienna:
Multiple Testing and Model Selection Issues in Genetics and Molecular Biology

Languages: English, some Spanish

Programming: Among others: R, Matlab, SAS, SPSS

Books:

- *Handbook of Multiple Testing*, Chapter 17: Identifying important predictors in large data bases -- multiple testing and model selection, CRC Press, 2021
- *Phenotypes and Genotypes, The Search for Influential Genes*
Series: Computational Biology, Vol. 18
Frommlet Florian, Bogdan Małgorzata, Ramsey David, Springer, 2016

Publications

Refereed journals:

- Grüninger SL, Frommlet F. *Half the price, twice the gain: How to simultaneously decrease animal numbers and increase precision with good experimental design.* Laboratory Animals. 2024 Oct;58(5):411-8.
- Frommlet F, *A neutral comparison of algorithms to minimize L0 penalties for high-dimensional variable selection*, 2024, Biometrical Journal 6(1), DOI: 10.1002/bimj.202200207.
- Lachmann, Jon, Geir Storvik, Florian Frommlet, and Aliaksandr Hubin. *A subsampling approach for Bayesian model selection*. 2022 International Journal of Approximate Reasoning 151: 33-63. DOI: 10.1016/j.ijar.2022.08.018
- Grasl S, Frommlet F, Faisal M, Marijic B, Schmid E, Heiduschka G, Brunner M, Grasl MC, Erovic BM, Janik S. *A new nomogram to predict oncological outcome in laryngeal and hypopharyngeal carcinoma patients after laryngopharyngectomy*. Eur Arch Otorhinolaryngol. 2022 Oct 1. doi: 10.1007/s00405-022-07668-1.
- Frommlet F, Szulc P, König F, Bogdan M. *Selecting predictive biomarkers from genomic data*, 2022, PLoS One. 17(6):e0269369. doi: 10.1371/journal.pone.0269369
- A. Hubin, G. Storvik, F. Frommlet, *Flexible Bayesian Nonlinear Model Configuration*, 2021, Journal of Artificial Intelligence Research, 72: 901-942
- F. Frommlet, *Improving reproducibility in animal research*. Sci Rep 10, 19239 (2020). <https://doi.org/10.1038/s41598-020-76398-3>
- F. Frommlet, G. Heinze (2020). *Experimental Replications in Animal Trials*, Laboratory Animals, 0023677220907617.
- Hubin A., Storvik G., Frommlet F. (2020) *A Novel Algorithmic Approach to Bayesian Logic Regression (with Discussion)*, Bayesian Anal. Volume 15, Number 1 (2020), 263-289

- Hubin A., Storvik G., Frommlet F. (2020) *A Novel Algorithmic Approach to Bayesian Logic Regression (Rejoinder)*, Bayesian Anal. Volume 15, Number 1 (2020), 312-333
- E. Sasaki, F. Frommlet, M. Nordborg: *GWAS with heterogeneous data: estimating the fraction of phenotypic variation mediated by gene expression data*, 2018, G3: Genes, Genomes, Genetics, g3. 200571.
- I. Pereira, E. Pablik, F. Schwarzhans, H. Resch, G. Fischer, C. Vass, F. Frommlet, *A functional regression model of the retinal nerve fiber layer thickness in healthy subjects*, 2018, TVST, Jan 19;7(1):9. doi: 10.1167/tvst.7.1.9
- R. Kluger, K.R. Huber, P.G. Seely, C.E. Berger, F. Frommlet: *Novel Tenascin-C Haplotype Modifies the Risk for a Failure to Heal After Rotator Cuff Repair*, 2017, Am J Sports Med., doi: 10.1177/0363546517729810
- P. Szulc, M. Bogdan, F. Frommlet, H. Tang: *Joint Genotype- and Ancestry-based Genome-wide Association Studies in Admixed Populations*, 2017, Genetic Epidemiology 41(6): 555-566. doi: 10.1002/gepi.22056.
- F. Frommlet, G.Nuel: *An adaptive Ridge procedure for L0 regularization*, 2016, PLoS ONE 11(2): e0148620. DOI: 10.1371/journal.pone.0148620
- R. Ristl, F. Frommlet, A. Koch, and M. Posch: *Fallback tests for co-primary endpoints*. Statistics in Medicine 35, 2669-2686 DOI: 10.1002/sim.6911
- E. Dolejsi, B. Bodenstorfer, F. Frommlet, *Analyzing Genome-Wide Association Studies with an FDR Controlling Modification of the Bayesian Information Criterion*, 2014, PLoS ONE 9(7): e103322. doi:10.1371/journal.pone.0103322
- A.Gola, M. Bogdan, F. Frommlet, *EA-MOSGWA – a tool for identifying associated SNPs in Genome Wide Association Studies*, 2013, Theoretical and Applied Informatics 3, 4, 251-262
- F. Frommlet, M. Bogdan, *Some optimality properties of FDR controlling rules under sparsity*, 2013, Electronic Journal of Statistics, Vol. 7, No. 0, 1328-1368
- F. Frommlet, I. Ljubic, H. Arnardottir, M. Bogdan, *QTL Mapping Using a Memetic Algorithm with modifications of BIC as fitness function*, 2012, Statistical Applications in Genetics and Molecular Biology, Vol. 11(4), Article 2.
- F. Frommlet, F. Ruhaltinger, P. Twarog, M. Bogdan, *Modified versions of Bayesian Information Criterion for genome-wide association studies*, 2012, CSDA, 56, 1038 - 1051
- M. Bogdan, A. Chakrabarti, F. Frommlet, J.K. Ghosh. *Asymptotic Bayes-Optimality under sparsity of some multiple testing procedures*, 2011, Annals of Statistics, 39 (3), 1551-1579.
- F. Frommlet, *Tag SNP selection based on clustering according to dominant sets found using replicator dynamics*, 2010, Adv Data Anal Classification 4:65–83
- F. Frommlet, *Some properties of a recently introduced approach to ordinal regression*, 2010, Austr Jour Statist 39 (3), 182 - 202

- I.M. Bomze, F. Frommlet, M. Locatelli, *Gap, cosum, and product properties of the θ' bound on the clique number*, 2010, Optimization, 59 (7)
- I.M. Bomze, F. Frommlet, M. Locatelli, *Copositivity cuts for improving SDP bounds on the clique number*, 2010, Math. Prog., 12., 13-32
- M. Bogdan, F. Frommlet, P. Biecek, R. Cheng, J.K. Ghosh and R.W. Doerge, *Extending the Modified Bayesian Information Criterion (mBIC) to dense markers and multiple interval mapping*, 2008, Biometrics. 64, 1162 – 1169,
- I.M. Bomze, F. Frommlet, M. Rubey, *Improving SDP bounds for minimizing quadratic functions over the l_1 -ball*, Optimization Letters, 2007, Vol 1, (1), 49-59
- F. Frommlet, M. Bogdan, A. Futschik, *Power Analysis of Database Search using Multiple Scoring Matrices*, 2006, Comp. Stat & Data Analysis, Vol 51, (3): 1656-1663
- A. Baierl, M. Bogdan, F. Frommlet, A. Futschik, *On Locating Multiple Interacting Quantitative Trait Loci in Intercross Designs*, Genetics. 2006 Jul;173(3):1693-703.
- F. Frommlet, A. Futschik, *On the Dependence Structure of Sequence Alignment Scores Calculated with Multiple Scoring Matrices*, Statistical Applications in Genetics and Molecular Biology, 2004, Vol. 3: No. 1, Article 24.
- F. Frommlet, A. Futschik, M. Bogdan, *On the Significance of Sequence Alignments when using Multiple Scoring Matrices*, Bioinformatics, 2004; 20 (6): 881-887

Proceedings and technical reports:

- Heinze G, Frommlet F. *Response to Landes: Comment on Frommlet and Heinze (2021): correcting the error degrees of freedom*. Laboratory Animals. 2024 Dec 18:00236772241276822.
- Drude, Natascha, Lorena Martinez-Gamboa, Meggie Danziger, Anja Collazo, Silke Kniffert, Janine Wiebach, Gustav Nilsonne et al., 2022, *Planning preclinical confirmatory multicenter trials to strengthen translation from basic to clinical research—a multi-stakeholder workshop report*.
- A. Hubin, F. Frommlet, G. Storvik, 2021, *Reversible genetically modified mode jumping MCMC*, 22nd European Young Statisticians Meeting, Proceedings
- F. Frommlet and M. G. Schimek, *Comments on: Hierarchical inference for genome-wide association studies: a view on methodology with software*, 2020, Computational Statistics 35(2): 47–49. DOI: 10.1007/s00180-019-00945-4
- F. Frommlet, *Modifications of BIC for data mining under sparsity*, 2012, Operations Research Proceedings 2011, 243 - 248
- F. Frommlet, M. Bogdan, A. Chakrabarti, *Asymptotic Bayes optimality under sparsity of selection rules for general priors*, 2010, Technical report [2010-07], arXiv:1005.4753

- M. Bogdan, A. Chakrabarti, F. Frommlet, J.K. Ghosh. *Bayes oracle and asymptotic optimality of multiple testing procedures under sparsity*, 2010, Technical report [ISDS 2010-06], arXiv:1002.3501
- F. Frommlet, *Critical Remarks on a Novel Approach to Ordinal Regression without Latent Variables*, 2008, Technical Report [ISDS 2008-06]
- J. Szyda, P. Biecek, F. Frommlet, J. K. Ghosh and M. Bogdan, *Analysis of genetic background of quantitative traits related to alcoholism by mixed inheritance and oligogenic models*, Technical Report, Wroclaw University of Technology, 2005.
- Florian Frommlet, Andreas Futschik, Małgorzata Bogdan, *Sequence Alignments when using Multiple Scoring Matrices*, Proceedings GCB03, 41 - 46

Cooperation with Physicians:

- Koneczny I, Macher S, Hutterer M, Seifert-Held T, Berger-Sieczkowski E, Blaabjerg M, Breu M, Dreyhaupt J, Dutra LA, Erdler M, Fae I, Fischer G, Frommlet F, Heidbreder A, Högl B, Klose V, Klotz S, Liendl H, Nissen MS, Rahimi J, Reinecke R, Ricken G, Stefani A, Süße M, Teive HAG, Weis S, Berger T, Sabater L, Gaig C, Lewerenz J, Höftberger R. *HLA dependency and possible clinical relevance of intrathecally synthesized anti-IgLON5 IgG4 in anti-IgLON5 disease*. Front Immunol. 2024 May 16;15:1376456. doi: 10.3389/fimmu.2024.1376456. eCollection 2024.
- Bagó-Horváth Z, Stolz M, Farr A, Tendl-Schulz KA, Frommlet F, Reckendorfer H, Koperek O, Neudert B, Marhold M, Heber U, Exner R. *Her2/Cep17 Ratio Predicts Residual Cancer Burden after Neoadjuvant Dual Her2 Blockade: Real-World Data of Women with Primary Her2-Amplified Breast Cancer*. Available at SSRN 5018735.
- Beghini M, Pichler M, Tinnefeld FC, Metz M, Möslinger D, Konstantopoulou V, Spenger J, Kautzky-Willer A, Frommlet F, Scherer T, Hufgard-Leitner M. *Poor adherence during adolescence is a risk factor for becoming lost-to-follow-up in patients with phenylketonuria*. Mol Genet Metab Rep. 2024 May 9;39:101087. doi: 10.1016/j.ymgmr.2024.101087. eCollection 2024 Jun.
- Weigert, Guenther, Gabor Deak, Martin Michl, Gregor Reiter, Daniela Boryshchuk, Florian Frommlet, Stefan Sacu, Bianca Gerendas, and Ursula Schmidt-Erfurth. "Influence of different fluid types on the development of fibrosis and atrophy in patients with nAMD." Acta Ophthalmologica 102 (2024).
- Weigert, Guenther, Gabor Deak, Martin Michl, Gregor Sebastian Reiter, Daniela Boryshchuk, Florian Frommlet, Stefan Sacu, Bianca S. Gerendas, and Ursula Schmidt-Erfurth. "Development of Fibrosis and Atrophy in nAMD in regard to fluid volume (IRF, SRF, PED) and fluctuation localization (1, 3, 6mm)." Investigative Ophthalmology & Visual Science 64, no. 8 (2023): 917-917.

- Grasl, Stefan, Florian Frommlet, Muhammad Faisal, Blazen Marijic, Elisabeth Schmid, Gregor Heiduschka, Markus Brunner, Matthaeus C. Grasl, Boban M. Erovic, and Stefan Janik. "A new nomogram to predict oncological outcome in laryngeal and hypopharyngeal carcinoma patients after laryngopharyngectomy." European Archives of Oto-Rhino-Laryngology 280, no. 3 (2023): 1381-1390.
- Beilhack G, Monteforte R, Frommlet F, Reindl-Schwaighofer R, Strassl R, Vchytil A. *Durable Anti-SARS-CoV-2 Antibody Response after mRNA-1273 Booster in Peritoneal Dialysis Patients during the Omicron Wave*. Vaccines (Basel). 2023 Jun 19;11(6):1121. doi: 10.3390/vaccines11061121.
- Marijić B, Tudor F, Janik S, Grasl S, Frommlet F, Maržić D, Hadžisejdžić I, Vukelić J, Braut T, Velepić M, Erovic BM. *Long-Term Care and Follow-Up in Laryngeal Cancer Patients: A Multicenter Retrospective Analysis*. J Pers Med. 2023 May 31;13(6):927. doi: 10.3390/jpm13060927.
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- Kohl, Mirjam M., Stefan Schwarz, Peter Jaksch, Gabriella Muraközy, Martin Kurz, Marlies Schönbacher, Alexander Tolios, Florian Frommlet, Konrad Hoetzenegger, and Günther F. Körmöczi. "High Rate of Passenger Lymphocyte Syndrome after ABO Minor Incompatible Lung Transplantation." American Journal of Respiratory and Critical Care Medicine ja (2023)
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- Schrutka L, Seirer B, Rettl R, Dachs TM, Binder C, Duca F, Dalos D, Badr-Eslam R, Kastner J, Hengstenberg C, Frommlet F, Bonderman D. *Heart failure with preserved ejection fraction: Calculating the risk of future heart failure events and death*. Front Cardiovasc Med. 2022 Oct 21;9:921132. doi: 10.3389/fcvm.2022.921132. eCollection 2022.

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- Beilhack G, Monteforte R, Frommlet F, Reindl-Schwaighofer R, Strassl R, Vychytal A. *Humoral Response to mRNA-1273 SARS-CoV-2 Vaccine in Peritoneal Dialysis Patients: Is Boostering After Six Months Adequate?* Front Med (Lausanne). 2022 Jun 24;9:905798. doi: 10.3389/fmed.2022.905798. eCollection 2022.
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Meister B, Heine M, Cisar A, Bachler H, Khalil M, Fuchs S, Enzinger C, Fazekas F, Leutmezer F, Berger T, Kristoferitsch W, Aboulenein-Djamshidian F. *Month-of-birth-effect in multiple sclerosis in Austria*. Mult Scler. 2018 Nov 22:1352458518810924. doi: 10.1177/1352458518810924. [Epub ahead of print]

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- Scope A, Schwendenwein I, Frommlet F. *Biological variation, individuality and critical differences of eight biochemical blood constituents in budgerigars (*Melopsittacus undulatus*)*. Vet Rec. 2006 Dec 16;159(25):839-43.
- Stadtbäumer K, Frommlet F, Nell B. *Effects of mydriatics on intraocular pressure and pupil size in the normal feline eye*. Vet Ophthalmol. 2006 Jul;9(4):233-7.
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- Scope A, Frommlet F, Schwendenwein I. *Circadian and seasonal variability and influence of sex and race on eight clinical chemistry parameters in budgerigars (*Melopsittacus undulatus*, Shaw 1805)*. Res Vet Sci. 2005 Feb;78(1):85-91.

- Matthes-Martin S, Lion T, Haas OA, Frommlet F, Daxberger H, Konig M, Printz D, Scharner D, Eichstill C, Peters C, Lawitschka A, Gadner H, Fritsch G., *Lineage-specific chimaerism after stem cell transplantation in children following reduced intensity conditioning: potential predictive value of NK cell chimaerism for late graft rejection*. Leukemia. 2003 Oct;17(10):1934-1942.
- Erovic BM, Pammer J, Hollemann D, Woegerbauer M, Geleff S, Fischer MB, Burian M, Frommlet F, Neuchrist C. *Motility-related protein-1/CD9 expression in head and neck squamous cell carcinoma*. Head Neck. 2003 Oct;25(10):848-57.
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- Matthes-Martin S, Lion T, Aberle SW, Fritsch G, Lawitschka A, Bittner B, Frommlet F, Gadner H, Peters C. *Pre-emptive treatment of CMV DNAemia in paediatric stem cell transplantation: the impact of recipient and donor CMV serostatus on the incidence of CMV disease and CMV-related mortality*, Bone Marrow Transplant. 2003 May;31(9):803-8.
- S Matthes-Martin, T Lion, O A Haas, F Frommlet, H Daxberger, M König, D Printz, D Scharner, C Eichstill, C Peters, A Lawitschka, H Gadner, G Fritsch *Lineage-specific chimaerism after stem cell transplantation in children following reduced intensity conditioning: potential predictive value of NK cell chimaerism for late graft rejection*. Leukemia. 2003 Oct ;17 (10):1934-42 14513041

Older Publications

- Frommlet F, Weinmuller EB, *On asymptotic error expansions for singular boundary value problems*; MATH MOD METH APPL S 11 (1): 71-85 FEB 2001
- Castella F, Erdos L, Frommlet F, Markovich P, Fokker-Planck equations as scaling limits of reversible quantum systems,
J STAT PHYS 100 (3-4): 543-601 AUG 2000.
- Frommlet F, Markowich PA, Ringhofer C, *A Wignerfunction approach to phonon scattering*, VLSI DES 9 (4): 339-350 1999
- DISSERTATION: Frommlet F, Zeitirreversibilität in Quantenmechanischen Systemen (Time Irreversibility in Quantum Mechanical Systems). *Doctoral Dissertation accepted by: Technical University of Berlin , Department of Mathematics/Computer Science, 2000-12-11*
- DIPLOMARBEIT (Published as technical report): F. Frommlet, E. B. Weinmüller, Asymptotische Fehlerentwicklungen für singuläre Randwertaufgaben, Technical Report No. 118, Department of Applied Mathematics and Numerical Analysis, Vienna University of Technology, Vienna, Austria 1995.

Projects

- 2022 – 2024: Principal Investigator Bürgermeisterfonds (20.000 Euro):
Title: Quality control measures for biomedical animal studies
- 2015 – 2019: COST Action IC1408, Member of Management Committee for Austria
Title: Computationally-intensive methods for the robust analysis of non - standard data
- 2012 - 2013: Key Investigator in project together with Austrian Ministry of Health (15.000 Euro from a total volume of 50.000 Euro),
Title: GENOVA, a tool to evaluate the importance of SNPs
- 2010 – 2014: Principal Investigator WWTF grant “Mathematik und ...” (total volume 372.000 Euro)
Title: Optimal selection procedures in genome-wide association studies
- 2009 – 2010: Principal Investigator ÖAD Projekt PL 02/2009, (total volume ca. 10.000 Euro)
Title: Statistical issues in data mining – optimal rules for high dimensional model selection and multiple testing.
- 2003 – 2005: Statistical advisor of the project “Eurochimerism Concerted Action” (not involved in funding)

Work as Referee for journals

- Statistical Applications in Genetics and Molecular Biology
- Statistics in Medicine
- Biometrical Journal
- Statistics
- Statistics and Computing
- Biostatistics
- Scandinavian Journal of Statistics
- Journal of Computational Statistics and Data Analysis
- Journal of Computational and Graphical Statistics
- Journal of Multivariate Analysis
- Probability and Mathematical Statistics
- Sankhya A
- Bioinformatics
- BMC Bioinformatics
- BMC Medical Genomics
- Genetics
- Annals of Human Genetics
- Heredity
- Open Life Sciences
- Scientific Reports
- PLOS ONE
- Algorithms for Molecular Biology
- Frontiers in Molecular Neuroscience
- Artificial Intelligence in Medicine
- Psychology Science
- Wiener Klinische Wochenschrift
- Journal of Mathematics Research
- Austrian Journal of Statistics
- Journal of Global Optimization
- SIAM Journal on Optimization
- Optimization Letters
- Computational Intelligence

Scientific activities

- 2025 – 2026: President of WBS
- Since 2024: Head of the Conference Advisory Committee of the IBC
- Since October 2022: Associate Editor for Biometrical Journal
- Since April 2014: Editorial Board Member of Scientific Reports
- 2023 – 2024: Secretary of WBS
- Co-Organization of Joint Seminar with BSSK in Graz, November 2024
- Organization of Joint Seminar with BSSK in Vienna, May 2023
- Organization of Workshop, June 2022: How to increase reproducibility in animal trials? Dilemmas and strategies
- October 2018 – October 2020: Scientific Reports Guest Editor of Special Collection “Reproducibility in animal trials”
- November 2017 – November 2023: IBS Conference Committee Member
- Organization of an Invited Session for CMStatistics 2017, London
- Member of LOC at CEN-ISBS Conference 2017, Vienna
- Organization of an Invited Session for CMStatistics 2016, Sevilla
- Organization of an Invited Session for CMStatistics 2015, London
- External Reviewer for Research Foundation Flanders (FWO)
- Scientific Advisory Board member of EMINENS project
- Organization of session on Bioinformatics for OR 2015, Vienna
- Organization of an Invited Session for ERCIM 2014, Pisa
- Organization of an Invited Session at the IBC 2014 in Florence
- Organization of session for ERCIM 2012, Oviedo
- Organization of session on Bioinformatics for OR 2011, Zurich
- 2008 - 2012: Board member of the Austrian society of OR (ÖGOR – Vorstandsmitglied)
- Reviewer for ÖAD
- Reviewer for ÖGOR prize 2010

Coferences and talks:

- Frommlet F., Lachman, Storvik, Hubin (2024), The R Package FBMS, Flexible Bayesian Model Selection, Invited Talk at Biometrisches Seminar Graz Wien, Graz, November 28
- Frommlet F., Lachman, Storvik, Hubin (2024), The R Package FBMS, Flexible Bayesian Model Selection, Compstat, Gießen (Germany), August 27
- Frommlet F., Lachman, Storvik, Hubin (2024), The R Package FBMS, Flexible Bayesian Model Selection, Nordstat, Tønsberg (Norway), June 18
- Frommlet F. (2023), Flexible Bayesian Nonlinear Models, Invited Talk at the TU Wien, November 29
- Frommlet F. (2023), A neutral comparison of algorithms to minimize L0 penalties for high-dimensional variable selection, CEN, Basel, Switzerland, September 05
- Frommlet F. (2023), A neutral comparison of algorithms to minimize L0 penalties for high-dimensional variable selection, Nordstat23, Göteborg, Sweden, June 20
- Frommlet F. (2023), A neutral comparison of algorithms to minimize L0 penalties for high-dimensional variable selection, Invited Talk at University Oslo, April 12
- Frommlet F. (2022), Flexible Bayesian Nonlinear Model Configuration, CMStatistics, London, UK, December 18
- Frommlet F. (2022), Flexible Bayesian Nonlinear Model Configuration, Uni Klagenfurt, October 28
- Frommlet F. (2022), Flexible Bayesian Nonlinear Model Configuration, IBC Riga, Lettland, July 14
- Frommlet F. (2021), Experimental replications in animal trials, FSVO Workshop – Limitation of constraint, Schweiz (on-line), November 26
- Frommlet F. (2021), Experimental replications in animal trials, LTK Module 14, University Zürich (on-line), September 9
- Frommlet F. (2021), Identifying important predictors in large data bases - Multiple testing and model selection, MCP on-line sessions (on-line), September 7
- Frommlet F. (2021), Do's and don'ts for planned replications of animal experiments, Salzburg, ROeS, September 7
- Frommlet F. (2020), A Genetically Modified Mode Jumping MCMC Algorithm for Model Selection in Non-Standard Applications, Bayes Workshop WU Wien (on-line), November 28
- Frommlet F. (2020), Experimental Replication in Animal Trials, 3R Society (on-line), November 3
- Frommlet F. (2020), Selecting predictive biomarkers from genomic data, ISCB Krakow (on-line conference), August 27

- Frommlet F. (2020), Reproducibility in Animal Trials, Aachen (on-line workshop), June 17
- Frommlet F. (2020), Experimental replications in animal trials, Workshop on Design and Analysis of Replication Studies, Zürich, Switzerland, January 23
- Hubin A., Storvik G., Frommlet F. (2019) Deep Bayesian Regression, SimStat 2019, Salzburg, September 5
- Frommlet F. (2019), Reproducibility of animal trials: what can be done about it? ROeS 2019, Lausanne, Switzerland, September 11
- Hubin A., Storvik G., Frommlet F. (2019) Deep Bayesian Regression, Cronos Meeting and Workshop on Multivariate Data Analysis, Limassol, Cyprus, April 14
- Hubin A., Storvik G., Frommlet F. (2018) Deep Bayesian Regression, UMI-SIMAI-PTM Joint meeting, Wroclaw, Poland, September 18
- Hubin A., Storvik G., Frommlet F. (2018) Deep Bayesian Regression, Compstat, Iasi, Rumania, August 30
- Frommlet F., (2018) Selecting predictive biomarkers from genomic data, IBC, Barcelona, Spain, July 12
- Hubin A., Storvik G., Frommlet F. (2017) Bayesian model selection in logic regression, CMStatistics, London, December 16
- Frommlet F. (2017) High dimensional model selection with FDR controlling L₀ penalties, Heidelberger Kolloquium Medizinische Biometrie, Informatik und Epidemiologie, Heidelberg, 06. November
- Hubin A., Storvik G., Frommlet F. (2017) Bayesian model selection in logic regression, CEN-ISBS 2017, Vienna, September 1
- Hubin A., Storvik G., Frommlet F. (2017) Bayesian model selection in logic regression, European Meeting of Statisticians, Helsinki, July 24
- Frommlet F., Bogdan M. (2017) Asymptotic Bayes Optimality under Sparsity Revisited, Workshop on Stochastic Models, Statistics and Their Applications, Berlin, February 23
- Frommlet F., Bogdan M. (2016) Some optimality properties of FDR controlling modifications of AIC and BIC in high dimensions, CMStatistics 2016, Sevilla, December 10
- Frommlet F. (2016) FDR controlling model selection procedures with applications in GWAS, CELS seminar, Oslo, September 29
- Frommlet F. (2016) High dimensional model selection with an adaptive ridge procedure for L₀ regularization, ISNPS, Avignon, June 11
- Frommlet F., Nuel G. (2015), An adaptive ridge procedure for L₀ regularization, CMStatistics 2015, London, December 13

- Frommlet F., Nuel G. (2015), An adaptive ridge procedure for L0 regularization, Eighth International Workshop on Simulation, Vienna, September 23
- Frommlet F. (2015), MOSGWA, a model selection based software environment for GWAS analysis, Statistical Modeling of Cancer Genetic Predisposition workshop, COST Action no. BM1206, Vienna, March 3
- Frommlet F., Bodenstorfer, B., Bogdan M. (2014), MOSGWA, a new software tool for model selection in GWAS, invited talk, Pisa, ERCIM 2014, December 7
- Frommlet F. (2014) MOSGWA, a model selection based software environment for GWAS analysis and its potential extensions, invited talk, Bertinoro Computational Biology 2014, October 2
- Frommlet F., Gola A., Bogdan M. (2014) Using Memetic Algorithms for Bayesian Analysis of Genome-wide Association Studies, IBC, Florence, Italy, July 8
- Frommlet F., Gola A. (2013) Using Memetic Algorithms for Bayesian Analysis of Genome-wide Association Studies, invited talk at ICSA, Hongkong, China, December 21
- Frommlet F. (2013) Model Selection Procedures for Genome Wide Association Studies, invited talk at Statistiktage, Vienna, October 24
- Frommlet F. (2013) Model Selection Procedures for Genome Wide Association Studies, invited talk at Biometrics Systmod seminar, Liege, Belgium, May 17
- Frommlet F. (2013) Model Selection Procedures for Genome Wide Association Studies, invited talk at Biometrics workshop, Stanford, USA, April 11
- Frommlet F. (2013) FDR controlling modifications of BIC for model selection in high dimension, Seminary Decartes University, Paris, France, March 21
- Frommlet F. (2012) Model selection approaches to GWAS analysis, invited talk at ERCIM 12, Oviedo, Spain, December 1- 3
- Frommlet F. (2012) FDR controlling modifications of BIC for model selection in high dimension, Berufungsvortrag W2 Professur, November 7, Munich, Germany
- Frommlet F. (2012) Optimal model selection procedures under sparsity with applications in genetics, IBC, Kobe, Japan, August 28
- Frommlet F. (2012) Optimal model selection procedures under sparsity with applications in genetics, Invited talk, JAIST, Kanazawa, Japan, August 20
- Frommlet F. (2012) MOSGWA, Model Selection for Genome Wide Association, Invited talk, TU Wroclaw, Poland, March 22
- Frommlet F. (2011) Modifications of BIC for model selection under sparsity, Habilitationskolloquium, Vienna, November 16
- Frommlet F. (2011) Modifications of BIC for model selection under sparsity: Theory and applications in genetics, Invited talk, ETH Zürich, Switzerland, November 11

- Frommlet F. (2011) Modifications of BIC for data mining under sparsity, OR 2011, Zürich, Switzerland, August 30 - September 2
- Frommlet F., Ruhaltiner F., Bogdan M. (2011) Model Selection vs. Multiple Testing in Genome Wide Association Studies, JSM, Miami, USA, July 30-Aug. 4
- Frommlet F. Modifikationen des BIC zur Modellselektion im Falle von hochdimensionalen Daten mit Anwendung in genomweiten Assoziationsstudien, Berufungsvortrag W2 Professur, June 2011, Düsseldorf, Germany
- Frommlet F. (2011) Analyse von hochdimensionalen Daten im Falle von Sparsity in der Bioinformatik, Invited talk at Predictive Analytics Conference, Vienna, Austria, June 7. - 8.
- Frommlet F., Ruhaltiner F., Bogdan M. (2011) Bayes optimal selection rules under sparsity with applications in GWAS, MASAMB, Vienna, Austria, April 11.
- Frommlet F., Ruhaltiner F., Bogdan M. (2010) A model selection approach to genome wide association studies, Invited talk at COMPUTING & STATISTICS (ERCIM'10), University of London, UK, December 10. - 12.
- Frommlet F., Ruhaltiner F., Bogdan M. (2010) A model selection approach to GWAS, Invited talk at the Stochastic Seminary, Torun University, Poland, November 7.
- Frommlet F., Twarog P., Bogdan M. (2010) Modifications of BIC: Asymptotic optimality properties under sparsity and applications in genome wide association studies, COMPSTAT 2010, Paris, August 22. – 27.
- Frommlet F., (2010) Multiple Testing vs. Model Selection in applications of Molecular Biology, Wittgenstein Recess, Gösing, August 4. - 6.
- Bogdan M., Chakrabarti C., Frommlet F., Ghosh J.K., (2010) Bayes oracle and asymptotic optimality of multiple testing procedures under sparsity, SUSTAIN workshop: Sparse structures: statistical theory and practice, Bristol, UK, June 16. -18.
- Bogdan M., Chakrabarti C., Frommlet F., Ghosh J.K., (2010) Asymptotic optimality properties of multiple testing and model selection procedures under sparsity, Invited talk at University of Limerick, May 6
- Bogdan M., Chakrabarti C., Frommlet F., Ghosh J.K., (2010) Bayes oracle and asymptotic optimality of multiple testing procedures under sparsity, Invited talk at IFAS Johannes Kepler University Linz, April 22
- Frommlet, F. (2009), Tag SNP selection based on clustering with dominant sets and the replicator dynamic, ROES - Seminar, Linz, September 13 – 17
- Frommlet, F. (2008), Tag SNP selection based on clustering with dominant sets and the replicator dynamic, Human Genome Variation, Toronto, October 15 – 17
- Frommlet, F. (2008) Tag SNP selection based on clustering with dominant sets and the replicator dynamics, Invited Talk at University of Limerick, September 2008

- Bomze, I.M., Frommlet, F., Locatelli, M., (2007) The first cut is the cheapest. Improving SDP bounds for the clique number via copositivity. Optimization 2007, Porto, July 22 - 25
- Bomze, I.M., Frommlet, F., Locatelli, M., (2006) Improving SDP bounds for maximum clique by adding linear cuts. Euro XXI, 21st European Conference on Operational Research, Reykjavik, 2-5 July 2006'
- Frommlet, F., Bogdan, M., Cheng, R., Ghosh, J. K., Doerge, R. W. (2006) A Modification of the BIC for QTL Detection in the Context of Dense Markers, Wien 3-10 October 2006
- Frommlet, F., Futschik, A. (2005) On the Dependence of Sequence Alignment Scores calculated with Different Scoring Matrices. 3rd World Conference on Computational Statistics, Limassol, 28-31 October 2005
- Frommlet, F., Futschik, A. (2005) On the Dependence of Sequence Alignment Scores calculated with Different Scoring Matrices. Workshop on Applied Optimization, Dresden, 7-8 October 2005
- Frommlet, F., (2005) Statistical analysis of Sensitivity/Quantifiability testing with EU-Chimerism markers. Eurochimerism Meeting, Vienna, 10-12 March 2005
- Frommlet, F., (2004) Study design for the last phase of the project "Eurochimerism Concerted Action". Eurochimerism Meeting, Turin, 27-29 October 2004
- Frommlet, F., Futschik, A., Bogdan, M. (2004) Sequence Alignment with Multiple Scoring Matrices. Talk at Institute for Genomics and Bioinformatics, TU Graz. September 2004
- Frommlet, F., Futschik, A., Bogdan, M. (2003) Sequence Alignment with Multiple Scoring Matrices. German Conference on Bioinformatics, München, 12-14 October 2003
- Frommlet F, Markowich PA, Ringhofer C, (1998) A Wignerfunction approach to phonon scattering. Conference on Applied and Industrial Mathematics, Venice 1998,
- Frommlet F, Markowich PA, Ringhofer C, (1998) A Wignerfunction approach to phonon scattering. 1st TMR-meeting jointly with the First European symposium on applied kinetic theory, Toulouse, 4-7 May 1998
- Frommlet F, Markowich PA, Ringhofer C, (1997) A Wignerfunction approach to phonon scattering. International Workshop on Quantum Kinetic Theory , Breckenridge, 4-13 August 1997

Teaching

In Austria:

Medical University Vienna

- Methoden der medizinischen Wissenschaft - SSM2 (Basic statistics for medical students):
 - Since 2023 Blockkoordinator
 - Since 2015 Coordination of Exercises (Kleingruppenkoordinator)
 - Since 2015 Lecture (1 hour)
 - SS 04, 05, 08, 11, 12, 13, 14 Exercise (1 hour)
- Seminary on statistical methods: Seminary, 1 hour
Since 2011 every WS and SS
- Propedeutics: Statistical planning and analysis of animal experiments, 2 hours
Since 2019 first every semester, now every second semester
- Propedeutics: Experimentelle biomedizinische Studien in Tieren, one talk
Since 2015 every semester
- Basic Lecture - Advanced Statistical Procedures and Theoretical Concepts
Since SS 12 every third semester
- Basic Lecture - Statistical Methods in Medical Research,
Since SS 14 every third semester
- Grundlagen der Biostatistik, Versuchsplanung und Literatursuche für Zahnmediziner (Basic statistics for dentists): Lecture + exercise, 1 hour
SS 03 (then still University Vienna)

University Vienna

- Wahrscheinlichkeitsrechnung: Vorlesung (StEOP), 1.5 hours,
WS 11, 13, 14, 15, 16, 17
- Statistical Genetics and Biometrics: Lecture + exercise, 2 hours,
WS 14, 15, 16
- Biometrie (Mixed Models): Lect. + exercise, 2 hours,
SS12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22
- Linear Multivariate Statistics: Lecture + exercise, 2 hours,
SS08, 09, 10, 11, 12, 13, 14, 15
- Biometrie 1 (Mathematical and Statistical Methods for Genetic Analysis):
Lect. + exercise, 2 hours, SS10, 11
- Introduction to Bioinformatics (one talk in a lecture series: "Statistical analysis
of highdimensional data in bioinformatics")
WS 10, 11, 14, 15, 16
- Introduction to probability: Lecture, 3 hours, WS 06, 07, 08, 09, 10
- Markov Processes: Exercise, 1 hour, WS 08, 09, 10, 11
- Vertiefung Biometrie (Biological sequence analysis): Lect. + exercise, 2 hours,
SS 09
- Analysis: Exercise, 2 hours, SS 08
- Probability and Statistics: PhD course (lecture), 1 hour, WS 07
- Nonparametrical Statistics: Exercise, 1 hour, WS 06, 07
- FK Wirtschaftsstatistik 1 (Business Statistics): Lecture + exercise, 2 hours,
SS 05, WS 05, SS 06
- VK Wirtschaftsstatistik 2 (Business Statistics): Lecture + exercise, 1 hour,
WS 04, SS 05, WS 05, SS 06
- Grundzüge der Wirtschaftsmathematik und Wirtschaftsstatistik (Basic Course
in Mathematics): Lecture + exercise, 2 hours,
WS 04
- Mathematical Statistics: Exercise, 2 hours, WS 02, 03, 04
- Wahrscheinlichkeitstheorie 2 (Probability): Exercise, 2 hours,
SS 03
- Mathematics for Computer Engineers: Exercise, 2 hours,
WS 02

International:

LMU Munich (Germany) as Guest Professor WS 12

- Statistik 3 (Measure theory and probability): Lecture, 4 hours,
- Computer Intensive Methods: Lecture, 3 hours,
- Practical Course in Statistics: 2 hours, WS 2012, LMU Munich

TU Wroclaw (Poland) as Guest Professor March 2009,

- Hidden Markov Models in Bioinformatics: PhD course, 1 hour,

Purdue University (US) as Visiting Assistant Professor Spring term 2007

- Stat 311 (Introduction to probability): Lecture + exercise, 3 hours,
- Stat 416 (Introduction to probability): Lecture + exercise, 3 hours
(two sections)

Supervision:

Medical University Vienna

Supervision of Master students

- Gregor Langhammer (2025, work in progress): Quality control measures for biomedical animal studies

Cosupervision of Master students:

- Moritz Kaindlstorfer (2025, work in progress): Quality control measures for biomedical animal studies
- Maria Kastanek (2017): „Bestimmung maternaler Entzündungsparameter im Rahmen der Routinebehandlung mit Betamethason bei drohender Frühgeburt“
- Dijana Madl (2016): "Auswirkungen des Assisted Hatching auf den Erfolg von IVF/ICSI-Behandlungen – eine retrospektive Datenanalyse"
- Nina-Katharina Wallczek (2015): "Saisonale Häufung des Geburtsdatums bei an Müliple-Sklerose Erkrankten"
- Robert Wiebringhaus (2014): "A Retrospective Analysis on Parenchyma Sparing Resection Methods in Pulmonary Metastasectomy"

Cosupervision of PhD

- Servan Grüninger (2025, work in progress)
- Aliaksandr Hubin (2018): "Bayesian model configuration, selection and averaging in complex regression contexts."
- Yao Xiaoguang (2010): "*The association study between interactions of Furin and NEDD4 gene and gene-environment and essential hypertension in Kazaks population of Xinjiang*"

Master students:

- Nina Adhofer (2025, work in progress)
- Anastasia Evanova (2024): "Spatial data analysis for retinal sensitivity data"
- Elke Bruns (2022): "Identification of non-linear Models with a Bayesian Modelselection Tool"
- Anastasiia Gruber (2021): "Planung von Beta Regressionsmodellen zur Analyse von Durchflussraten in Bypass-Gefäßen"
- Eleonore Pablik (2020): "Modelling Retinal Nerve Fiber Layer Thickness with functional regression"
- Michael Hagmann (2016): "Comparing some model selection procedures for GWAS analysis." **ÖSG Förderpreis 2017 für Angewandte Statistik**
- Helga Arnardottir (2013): "Genetic Algorithms for Model Selection in QTL Mapping"