Curriculum Vitae

Dr. rer. nat. Gero Walter, Dipl.-Statistician

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Born June 26th, 1979 in Tübingen, Germany. Unmarried.

CV in a nutshell

2015	Postdoctoral Researcher at TU Eindhoven (NL), independent research and Master thesis project supervision in reliability and maintenance planning.
2014	Temporary Lecturer at Durham University (UK), teaching courses in Bayesian statistics and decision theory.
2013	Dr. rer. nat. (PhD) in Statistics at LMU Munich (DE), thesis on Bayesian methods using sets of prior distributions.
2007	Diplom-Statistiker at LMU Munich (DE), thesis on Bayesian linear regression under limited information.

CV details

Awards

07 / 2015	Best poster award (1st Prize) at ISIPTA'15 (joint work with Frank Coolen and Simme Douwe Flapper).
07 / 2015	Best poster award (2nd Prize) at ISIPTA'15 (joint work with Christoph Jansen and Thomas Augustin).
07 / 2011	IJAR Young Researcher Award 2011 (Silver Award).
07 / 2011	Best poster award (1st Prize) at ISIPTA'11 (joint work with Manuel Eugster and Thomas Augustin).

Languages

German	mother tongue	*Italian*	fluently	*Icelandic*	intermediate
English	fluently	*French*	intermediate		

Education and work experience

2015 – 2016 Postdoctoral Researcher at the Operations, Planning, Accounting, and Control (OPAC) group, Department of Industrial Engineering & Innovation Sciences, TU Eindhoven, NL. DINALOG project "Coordinated Advanced Maintenance and Logistics Planning for the Process Industries" (CAMPI).

1 – 12 / 2014 Temporary Lecturer at the Department of Mathematical Sciences, Durham University, Durham, UK, teaching lectures on Bayesian Statistics and Decision Theory, and supervising final year projects.

10 / 2013 Ph.D. in Statistics (magna cum laude) at Ludwig-Maximilians-University (LMU) Munich, Germany, with thesis "Generalized Bayesian Inference under Prior-Data Conflict" ([9] in the list of publications, page 10).

2007 – 2013 Research Assistant at the Working Group 'Methodological Foundations of Statistics and their Applications' (head Prof. Dr. Thomas Augustin), Department of Statistics, LMU Munich, Germany. Responsibilities included teaching for statistics students and other majors, assistance in supervision of Bachelor's theses, administrative work and student guidance related to the department's Bachelor's and Master's study programmes.

7 / 2010 Participant of the *4th SIPTA School on Imprecise Probabilities*, Durham.

7 / 2008 Participant of the *3rd SIPTA School on Imprecise Probabilities*, Montpellier.

2000 – 2007 Student in the Statistics study programme (*Diplom-Studiengang Statistik*, equivalent to an integrated Master's programme) at LMU Munich, with 'subjects of application' Political Science and Sociology; *Diplom* (equivalent to a Master's degree) with cumulative grade 1.37 (1 = 'very good', best grade; 2 = 'good'), including a thesis with grade 1.0 (best grade) on the generalization of Bayesian estimation of regression coefficients using sets of priors (in German, "Bayes-Regression mit Mengen von Prioris - Ein Beitrag zur Statistik unter komplexer Unsicherheit", see [19] in the list of publications on page 10), supervised by Prof. Dr. Thomas Augustin.

2005 – 2007 Project work for HelmholzZentrum Research Unit "Epidemiology of Air Pollution Health Effects" (see below).

7 – 9 / 2005 Internship at HelmholzZentrum München – German Research Center for Environmental Health (formerly GSF), Institute for Epidemiology, Research Unit 'Epidemiology of Air Pollution Health Effects' (head Dr. A. Peters); working for the AIRGENE study group.

2004 – 2007 Student assistant at the Department of Statistics, Ludwig-Maximilians-University Munich, working for Prof. Dr. Thomas Augustin.

2003 Elected as student representative in the council of the faculty for Mathematics, Informatics and Statistics; reelected in 2004.

2002 – 2003 Guest student at the University of Palermo, Italy, with the Erasmus programme (one year).

2001 – 2007 Active member of the student council of the department ('Fachschaft'), co-organizing support for first-year students, German-wide meetings of statistics students, and several festivities.

Student project supervision

Links to collaborating companies and public versions of student theses are given on `http://www.geeeero.de/lehre_en.html#supervision`.

- Master thesis Robin van Sprang (TU Eindhoven), in collaboration with Marel Poultry Processing (condition-based maintenance, 2017)

- Master thesis Tom Avontuur (TU Eindhoven), in collaboration with Tata Steel (maintenance planning, 2017).

- Master thesis Wouter Lubbers (TU Eindhoven), in collaboration with Tata Steel Packaging (condition-based maintenance, 2016).

- Master thesis Lex Roording (TU Eindhoven), in collaboration with DAF Trucks (reliability assessments, 2016).

- Master thesis René Gorisse (TU Eindhoven), in collaboration with BP Refinery Rotterdam (performance measurement and maintenance planning, 2016).

- Master thesis Robin Bakker (TU Eindhoven), in collaboration with Smurfit Kappa Roermond Papier (maintenance planning, 2016).

- Bachelor thesis Tijs Metink (TU Eindhoven), in collaboration with the Royal Netherlands Navy (degradation processes and life cycle analysis, 2016).

- Bachelor thesis Stefan van der Linden (TU Eindhoven), in collaboration with FEI (spare parts planning, 2016).

- Master thesis Lisanne Derks (TU Eindhoven), in collaboration with FrieslandCampina (promotional sales prediction, 2015).

- Master thesis Arjen Schröder (TU Eindhoven), in collaboration with NedTrain and Frankfurt Consulting Engineers (condition-based maintenance, 2015).

- Master thesis Steef Pepping (TU Eindhoven), in collaboration with Stork and Sitech (human errors in maintenance, 2015).

- Master thesis Anouk Geelen (TU Eindhoven), in collaboration with SABIC (maintenance planning, 2015).

- Bachelor thesis Ruud Meijering (TU Eindhoven), in collaboration with VDL Industrial Modules (quality control, 2015).

- Final year project Andrew Graham (Durham University, reliability analysis, 2015).

- Bachelor thesis Norbert Krautenbacher (LMU Munich, generalized Bayesian methods, 2011)

Teaching

Teaching material is available upon request; teaching material for some of the courses at LMU (in German) can also be downloaded from the respective course homepages linked from `http://walter.userweb.mwn.de/lehre.html#lehre`.

August 2016	Lectures and tutorials on robust Bayesian statistics, Bayesian hierarchical modelling, Simulation and MCMC (*7th SIPTA summer school*, Durham University, UK)
December 2015	Lecture and tutorial on Bayesian statistics and prior-data conflict (Lund University, SE)
Michaelm. 2014	Lectures for "Decision Theory"
	Tutorials for "Probability and Actuarial Mathematics" (Dr. Ostap Hryniv)
	Tutorials for "Probability and Geometric Topology" (Dr. Ostap Hryniv)
Epiphany 2014	Lectures for "Bayesian Statistics"
	Tutorials for "Calculus and Probability I" (Dr. Matthias Troffaes)
	Computer classes for "Statistics I" (Dr. Peter Craig)
Summer 2012	Support classes for "Statistics 2 for sociologists" (Prof. Dr. Helmut Küchenhoff)
Winter 11/12	Support classes for "Statistics 1 for sociologists" (Prof. Dr. Gernot Müller)
	Seminar "Insights into current research topics in statistics" (Prof. Dr. Thomas Augustin)
Summer 2011	Support classes for "Statistics 2 for sociologists" (Prof. Dr. Ulrich Pötter)
Winter 10/11	Support classes for "Introduction to Bayesian statistics" (Prof. Dr. Helga Wagner)
	Support classes for "Statistics 1 for sociologists" (Prof. Dr. Helga Wagner)
	Additional exercise classes for "Statistics 1 for sociologists" (Prof. Dr. Helga Wagner)
	Seminar "Statistical challenges in social surveys" (Prof. Dr. Thomas Augustin, PD Dr. Rudolf Seising)
Summer 2010	Support classes for "Decision Theory" (Prof. Dr. Thomas Augustin)
	Support classes for "Statistics 2 for sociologists" (Prof. Dr. Thomas Augustin)
Winter 09/10	Support classes for "Statistics 1 for sociologists" (Prof. Dr. Thomas Augustin)
	Additional exercise classes for "Statistics 1 for sociologists" (Prof. Dr. Thomas Augustin)
	Seminar "Philosophies of Science and Transformations of Knowledge in the 20th century – an interdisciplinary Seminar on the Foundations of Statistics" (Prof. Dr. Thomas Augustin, Prof. PD Dr. Rudolf Seising)
Summer 2009	Support classes for "Decision Theory" (Prof. Dr. Thomas Augustin)
	Support classes for "Statistics 2 for sociologists" (Dr. Carolin Strobl)
Winter 08/09	Support classes for "Statistics 1 for sociologists" (Dr. Carolin Strobl)
	Support classes for "Statistics 1 for economists and business economists" (PD. Dr. Christian Heumann)

Summer 2008	Support classes for "Decision Theory" (Prof. Dr. Thomas Augustin)
	Support classes for "Statistics 2 for economists and business economists" (Prof. Dr. Helge Toutenburg)
Winter 07/08	Support classes for "Statistics 3 for students with Statistics as a minor/elective subject" (Prof. Dr. Ludwig Fahrmeir)
	Support classes for "Statistics 1 for economists and business economists" (Prof. Dr. Helge Toutenburg)
	Support classes "Discussion of selected works on methodological basics of Statistics and its applications"
Summer 2007	Seminar "Modelling of *uncertain knowledge* – Alternatives to and generalizations of the concept of probability" (Prof. Dr. Thomas Augustin)

Talks and Posters

Talk slides and posters can be downloaded from `http://www.geeeero.de/forschung_en.html#talks`.

03 / 2017	"Unfallstatistik 2016", talk at the Open Data Day Münster 2017, Code for Münster, Münster, Germany (Traffic Accidents Statistics 2016, in German).
12 / 2016	"Nonparametric Bayesian System Reliability using Sets of Priors", talk at the Institute for Risk und Reliability, Leibniz University Hannover, Germany.
12 / 2016	"Imprecise Probability: General Ideas and Statistical Approaches", talk at the Institute for Risk und Reliability, Leibniz University Hannover, Germany.
11 / 2016	"Dynamic and Adaptive Maintenance Policies for Complex Systems based on Real-Time Data", talk at the final meeting of the CAMPI project participants, Stork Headoffice, Utrecht, the Netherlands.
09 / 2016	"Statistical Aspects of Reliability and Maintenance Optimisation" and "Elicitation of Expert Information in Maintenance Optimisation", two talks at the *Ninth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 9)*, Durham University, UK.
06 / 2016	"Sets of Priors Reflecting Prior-Data Conflict and Agreement" talk at the 16th International Conference on Information Processing and Management of Uncertainty in Knowledege-Based Systems (IPMU 2016), TU Eindhoven, the Netherlands.
04 / 2016	"Nonparametric Bayesian System Reliability with Sets of Priors", talk at the 2016-04-13 meeting of the LMS Joint Research Group "Mathematical Models in Reliability", Durham University, UK.
04 / 2016	"Nonparametric Bayesian System Reliability with Imprecise Prior Information on Component Lifetimes", talk at SIAM (Society for Industrial and Applied Mathematics) Conference on Uncertainty Quantification (UQ16), EPFL Lausanne, Switzerland.

03 / 2016	"Nonparametric Bayesian System Reliability with Sets of Priors", talk at Fourth Joint Statistical Meeting of the Deutsche Arbeitsgemeinschaft Statistik (DAGStat 2016), Georg-August University Göttingen, Germany.
02 / 2016	"Nonparametric System Reliability Combining Expert Knowledge and Data", talk at Maintenance Research Day, NS Trefpunt, Utrecht, the Netherlands.
12 / 2015	"Bayesian Inference and Prior-Data Conflict", talk at the Centre of Environmental and Climate Research, Lund University, Sweden.
11 / 2015	"System Reliability Estimation under Prior-Data Conflict", talk at Frankfurt Consulting Engineers GmbH, Hochheim (Main), Germany.
10 / 2015	"Robust Bayesian Estimation of System Reliability with Scarce and Surprising Data", talk at the OPAC seminar of the Department of Industrial Engineering & Innovation Sciences, TU Eindhoven, the Netherlands.
09 / 2015	"Robust Bayesian Estimation of System Reliability with Scarce and Surprising Data", talk at the 25th European Safety and Reliability Conference (ESREL 2015), ETH Zurich, Switzerland.
09 / 2015	"System Reliability Bounds under Sets of Priors with Crossing CDFs", talk at the *Eighth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 8)*, LMU Munich, Germany.
07 / 2015	"System reliability estimation under prior-data conflict" and "Updated network analysis of the imprecise probability community based on ISIPTA electronic proceedings", two posters at the Ninth International Symposium on Imprecise Probability: Theories and Applications (ISIPTA'15), Pescara, Italy.
04 / 2015	"Cautious Uncertainty Modelling for Common-Cause Failure Models", talk at the OPAC seminar of the Department of Industrial Engineering & Innovation Sciences, TU Eindhoven, the Netherlands.
11 / 2014	"Cautious Uncertainty Modelling in Common-Cause Failure Models with Sets of Conjugate Priors", talk at the Department of Industrial Engineering & Innovation Sciences, TU Eindhoven, the Netherlands.
09 / 2014	"Sample Size Calculations based on Posterior Imprecision", talk at the *Seventh Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 7)*, Ghent University, Belgium.
06 / 2014	"Density Ratio Class Models and Imprecision", talk at the Statistics Department of LMU Munich, Germany.
10 / 2013	"Generalized Bayesian Inference under Prior-Data Conflict", Ph.D. defense talk at the Statistics Department of LMU Munich, Germany.
09 / 2013	"Prior-Data Conflict in Generalized Bayesian Inference", talk at the Department of Mathematical Sciences, Durham University, UK.

03 / 2013	"Modelling Epistemic Uncertainty in Common-Cause Failure Models with Sets of Conjugate Priors" (joint work with Matthias Troffaes and Dana Kelly), talk at *First workshop on Uncertainty Quantification and Data Assimilation in Numerical Simulation of Physical Systems for Risk-Informed Decision Making (SIMRIDE 2013)*, Durham University, UK.
03 / 2013	"Bayesian Inference with Sets of Conjugate Priors: Parameter Set Shapes and Model Behaviour", talk at the *Statistics Seminar* of the Department of Mathematical Sciences, Durham University, UK.
09 / 2012	"Boat or bullet: prior parameter set shapes and posterior imprecision", talk at *Fifth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 5)*, LMU Munich, Germany.
06 / 2012	"Bayesian Inference with Sets of Conjugate Priors", talk at *Sommerklausur 2012* of the department's graduate school "Statistics: Theory and Methods of Empirical Modeling", Herrsching, Germany.
11 / 2011	"Sets of canonical parameters in imprecise Bayesian inference with conjugate priors,", talk at *Workshop on Geometry of Imprecise Probability and related Statistical Methods (GEOMIP-11)*, Durham University, UK.
09 / 2011	"Regression Models in Statistics — A Short Guide Through a Set of Abbreviations Containing the Letters L, M, G, and A", "Imprecise Bayesian Linear Regression", and "A New Class of Parameter Shapes for Generalized iLUCK Models", three talks at the *Fourth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 4)*, University of Ljubljana, Slovenia.
07 / 2011	"A Network Analysis of the Imprecise Probability Community based on ISIPTA Electronic Proceedings" (joint work with Manuel Eugster and Thomas Augustin), poster at *ISIPTA '11*, University of Innsbruck, Austria (see 'Awards' and 'Software').
07 / 2011	"On Prior-Data Conflict in Predictive Bernoulli Inferences" (joint work with Frank Coolen and Thomas Augustin), talk and poster at *ISIPTA '11*, University of Innsbruck, Austria.
09 / 2010	"Prior-Data Conflict: a brief introduction" and "Software for Generalized iLUCK-models", two talks at the *Third Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 3)*, Durham University, UK.
05 / 2010	"*Strong happiness* and other properties of certain imprecise probability models when treating samples sequentially", talk at the Statistics Department of LMU Munich, Germany.
04 / 2010	"The Effect of Prior-Data Conflict in Bayesian Linear Regression", talk at the *Lecture Day with Prof. Balakrishnan*, Durham University, UK.
03 / 2010	"Prior-Data Conflict and Generalized Bayesian Inference" (extended version of talk below), talk at the *Statistics Seminar* of the Department of Mathematical Sciences, Durham University, UK.

03 / 2010	"Prior-Data Conflict and Generalized Bayesian Inference", talk at *DAGStat 2010*, Dortmund, Germany.
09 / 2009	"Linear regression with sets of conjugate priors", talk at the *Second Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 2)*, LMU Munich, Germany.
07 / 2009	"Software for Generalized Bayesian Inference – An object-oriented R implementation of generalized iLUCK-models", poster at *ISIPTA '09*, Durham University, UK.
06 / 2009	"Generalized iLUCK-models and prior-data conflict – A contribution to Generalized Bayesian Inference", talk at the *Young Researchers' Workshop of Deutsche Statistische Gesellschaft*, Merseburg, Germany.
02 / 2009	"Software for Generalized Bayesian Inference for Samples from Exponential Families – An object-oriented R implementation of generalized iLUCK-models", talk at the Statistics Department of LMU Munich, Germany.
05 / 2008	"Generalized Bayesian Inference and Prior-data Conflict" and "Bayesian Estimation of Linear Regression Parameters with Sets of Conjugate Priors", two talks at the *First Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 1)*, Durham University, UK.
12 / 2007	"Imprecise probability models and prior-data conflict", talk at the Statistics Department of LMU Munich, Germany.
07 / 2007	"Linear Regression Analysis under Sets of Conjugate Priors", talk and poster at *ISIPTA '07*, Charles University, Prague, Czech Republic.

Other scientific activities

Visiting researcher

12 / 2016	Institute for Risk and Reliability, Leibniz-University Hannover, Germany (one week, by invitation of Michael Beer).
04 / 2016	Department of Mathematical Sciences, Durham University, UK (one week, by invitation of Frank Coolen).
12 / 2015	Centre of Environmental and Climate Research, Lund University, Sweden (two days, by invitation of Ullrika Sahlin).
03 / 2013	Department of Mathematical Sciences, Durham University, UK (two weeks, by invitation of Frank Coolen).
11 / 2011	Department of Mathematical Sciences, Durham University, UK, (one week, by invitation of Frank Coolen).
02 – 04 / 2010	Department of Mathematical Sciences, Durham University, UK, (two months, by invitation of Frank Coolen).

Software

08 / 2013	`luck`: Software for generalized Bayesian Inference with iLUCK-models (joint work with Norbert Krautenbacher), add-on package for the statistical programming environment R. In development, project page `http://r-forge.r-project.org/projects/luck/`. Install from within R by `install.packages("luck", repos="http://R-Forge.R-project.org")`
06 / 2011	`ISIPTA`: Network Analysis of the Imprecise Probability Community based on ISIPTA Electronic Proceedings (joint work with Manuel Eugster and Thomas Augustin, see 'Awards' and 'Talks and Posters'), add-on package for the statistical programming environment R (`http://cran.r-project.org/package=ISIPTA`).

Refereeing

2008 – 2017	Article reviews for *Entropy*, *Biometrical Journal*, *International Journal of Approximate Reasoning*, *IPMU* conference proceedings, *ISIPTA* conference proceedings, *Journal of Statistical Planning and Inference Journal of Statistical Theory and Practice*, and *Reliability Engineering and System Safety*.
2009	Book review for *Elsevier*, together with T. Augustin and A. Wiencierz.

Workshop and special session organisation

09 / 2016	Co-organisation of the *Ninth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 9)* at the Department of Mathematical Sciences, Durham University, together with Matthias Troffaes.
06 / 2016	Organisation of the special session "Uncertainty Quantification with Imprecise Probability" for the *16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU 2016)*, Eindhoven University of Technology.
09 / 2012	Co-organisation of the *Fifth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 5)* at the Department of Statistics, Ludwig-Maximilians-University Munich (LMU), together with Thomas Augustin, Marco Cattaneo, Georg Schollmeyer, and Andrea Wiencierz.
09 / 2011	Co-organisation of the *Forth Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 4)* at the Faculty of Social Sciences, University of Ljubljana, together with Damjan Škulj, Thomas Augustin, Frank Coolen, Gert de Cooman, and Matthias Troffaes.
09 / 2010	Co-organisation of the *Third Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 3)* at the Department of Mathematical Sciences, Durham University, together with Thomas Augustin, Frank Coolen, Richard Crossman, Nathan Huntley, and Matthias Troffaes.

09 / 2009	Co-organisation of the *Second Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP 2)* at the Department of Statistics, Ludwig-Maximilians-University Munich (LMU), together with Thomas Augustin, Marco Cattaneo, and Andrea Wiencierz.

Chairing

09 / 2016	Chair of the session on reliability, as part of *WPMSIIP 9*.
06 / 2016	Chair of the special session "Uncertainty Quantification with Imprecise Probability", as part of *IPMU 2016*.
09 / 2015	Chair of the session on reliability and risk, as part of *WPMSIIP 8*.
09 / 2014	Chair of the session on classification, as part of *WPMSIIP 7*.
09 / 2012	Co-chair of the sessions on classification, regression and support vector machines, together with Lev Utkin, as part of *WPMSIIP 5*.
09 / 2011	Co-chair of the session on modelling dependence / multivariate statistics, together with Alessio Benavoli, as part of *WPMSIIP 4*.
09 / 2010	Chair of the session on prior-data conflict, as part of *WPMSIIP 3*.
09 / 2009	Co-chair of the session on regression, together with Jochen Einbeck, as part of *WPMSIIP 2*.
05 / 2008	Co-chair of the session on regression, together with Jochen Einbeck, as part of *WPMSIIP 1*.

List of publications

[1] **Gero Walter** and Simme Douwe Flapper. Condition-based maintenance for complex systems based on current component status and Bayesian updating of component reliability. *Reliability Engineering & System Safety*, in press. http://dx.doi.org/10.1016/j.ress.2017.06.015, 2017.

[2] **Gero Walter**, Louis J.M. Aslett, and Frank P.A. Coolen. Bayesian nonparametric system reliability using sets of priors. *International Journal of Approximate Reasoning*, 80:67–88, 2017. http://dx.doi.org/10.1016/j.ijar.2016.08.005.

[3] **Gero Walter** and Frank P.A. Coolen. Robust Bayesian reliability for complex systems under prior-data conflict. Submitted to ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering. Manuscript available at http://arxiv.org/abs/1610.07222, 2016.

[4] **Gero Walter** and Frank P. A. Coolen. Sets of priors reflecting prior-data conflict and agreement. In Paulo Joao Carvalho, Marie-Jeanne Lesot, Uzay Kaymak, Susana Vieira, Bernadette Bouchon-Meunier, and R. Ronald Yager, editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems: 16th International Conference, IPMU 2016, Eindhoven, The Netherlands, June 20-24, 2016, Proceedings, Part I*, pages 153–164, Cham, 2016. Springer International Publishing. http://dx.doi.org/10.1007/978-3-319-40596-4_14.

[5] Frank P. A. Coolen, Tahani Coolen-Maturi, Louis J.M. Aslett, and **Gero Walter**. Imprecise system reliability using the survival signature. In Radim Bris, Vaclav Snasel, Chu Duc Khanh, and Phan Dao, editors, *Applied Mathematics in Engineering and Reliability – Proceedings of the 1st International Conference on Applied Mathematics in Engineering and Reliability (ICAMER'16)*, pages 207–214. CRC Press, 2016. `http://pure.tue.nl/ws/files/13617753/Coolen_ICAMER16.pdf`.

[6] **Gero Walter**, Andrew Graham, and Frank P. A. Coolen. Robust Bayesian estimation of system reliability for scarce and surprising data. In L. Podofillini, B. Sudret, B. Stojadinović, E. Zio, and W. Kröger, editors, *Safety and Reliability of Complex Engineered Systems: ESREL 2015*, pages 1991–1998. CRC Press, 2015. `http://www.crcpress.com/9781138028791`.

[7] Thomas Augustin, **Gero Walter**, and Frank P. A. Coolen. Statistical inference. In Thomas Augustin, Frank P. A. Coolen, Gert de Cooman, and Matthias C. M. Troffaes, editors, *Introduction to Imprecise Probabilities*. Wiley, 2014. `http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0470973811.html`.

[8] Matthias C. M. Troffaes, **Gero Walter**, and Dana L. Kelly. A robust Bayesian approach to modelling epistemic uncertainty in common-cause failure models. *Reliability Engineering & System Safety*, 125:13–21, 2014. `http://dx.doi.org/10.1016/j.ress.2013.05.022`.

[9] **Gero Walter**. *Generalized Bayesian Inference under Prior-Data Conflict*. PhD thesis, Department of Statistics, LMU Munich, 2013. `http://edoc.ub.uni-muenchen.de/17059/`.

[10] **Gero Walter**. A technical note on the Dirichlet-Multinomial model — the Dirichlet distribution as the canonically constructed conjugate prior. Technical Report 131, Department of Statistics, LMU Munich, 2012. `http://epub.ub.uni-muenchen.de/14068/`.

[11] Matthias C. M. Troffaes, Dana L. Kelly, and **Gero Walter**. Imprecise Dirichlet model for common-cause failure. In *Proceedings of PSAM 11 & ESREL 2012 Conference on Probabilistic Safety Assessment*, Helsinki, Finland, 2012. International Association for PSAM.

[12] **Gero Walter**, Thomas Augustin, and Frank P.A. Coolen. On prior-data conflict in predictive Bernoulli inferences. In Frank P.A. Coolen, Gert de Cooman, Thomas Fetz, and Michael Oberguggenberger, editors, *ISIPTA'11: Proceedings of the Seventh International Symposium on Imprecise Probabilities: Theories and Applications*, pages 391–400. SIPTA, 2011. `http://www.sipta.org/isipta11/proceedings/046.html`.

[13] **Gero Walter** and Thomas Augustin. Bayesian linear regression — different conjugate models and their (in)sensitivity to prior-data conflict. In Thomas Kneib and Gerhard Tutz, editors, *Statistical Modelling and Regression Structures*, Festschrift in Honour of Ludwig Fahrmeir, pages 59–78. Springer, 2010. `http://www.springerlink.com/content/ut13855471268053/`.

[14] **Gero Walter** and Thomas Augustin. Bayesian linear regression — different conjugate models and their (in)sensitivity to prior-data conflict. Technical Report 69, Department of Statistics, LMU Munich, 2009. Substantially extended version of [13]. `http://epub.ub.uni-muenchen.de/11050`.

[15] **Gero Walter** and Thomas Augustin. Imprecision and prior-data conflict in generalized Bayesian inference. *Journal of Statistical Theory and Practice*, 3:255–271, 2009. `http://dx.doi.org/10.1080/15598608.2009.10411924`.

Reprinted as book chapter in: Pauline Coolen-Schrijner, Frank P.A. Coolen, Matthias C.M. Troffaes, Thomas Augustin, and Sat Gupta, editors, *Imprecision in Statistical Theory and Practice*, Grace Scientific Publishing, 2009.

[16] **Gero Walter**. Sketch of an alternative approach to linear regression analysis under sets of conjugate priors. Discussion Paper. `http://www.geeero.de/files/isipta07_conjugate_prior.pdf`, 2007.

[17] **Gero Walter**. The normal regression model as a LUCK-model. Discussion Paper. `http://www.geeero.de/files/isipta07_proof.pdf`, 2007.

[18] **Gero Walter**, Thomas Augustin, and Annette Peters. Linear regression analysis under sets of conjugate priors. In Gert de Cooman, Jiřina Vejnarová, and Marco Zaffalon, editors, *ISIPTA'07, Proceedings of the Fifth International Symposium on Imprecise Probabilities: Theories and Applications*, pages 445–455. SIPTA, 2007. `http://www.sipta.org/isipta07/proceedings/041.html`.

[19] **Gero Walter**. Robuste Bayes-Regression mit Mengen von Prioris — Ein Beitrag zur Statistik unter komplexer Unsicherheit (Robust Bayesian regression with sets of priors — a contribution to statistics with complex uncertainty, in German). Diplomarbeit (Diploma thesis), Department of Statistics, LMU Munich, 2006. `http://www.geeero.de/files/Diplomarbeit_GeroWalter.pdf`.