Curriculum Vitae
Associate Professor Dr. Yuri Goegebeur

1 Personal data

- **Home address:** Holmehusvej 28 1TV, DK 5000 Odense C, Denmark, tel: +45 28 34 21 40
- **Office address:** University of Southern Denmark, Department of Mathematics and Computer Science, Campusvej 55, DK 5230 Odense M, Denmark, tel: +45 65 50 44 76,
  email: yuri.goegebeur@imada.sdu.dk,
  website: http://www1.imada.sdu.dk/∼yuri/yuri.goegebeur.htm

- **Born:** November 23, 1971, Ostend, Belgium
- **Marital status:** married with Jing Qin, 1 child Amélie
- **Education:**
  - 2000: PhD in Sciences – Mathematics, doctoral dissertation: Analysis of Extremes and Regression Models, promotor Prof. Dr. Jan Beirlant (K.U.Leuven, Department of Mathematics)
  - 1996-2000: Doctoral program, Faculty of Sciences, K.U.Leuven
  - 1994: Master of Statistics, Faculty of Sciences, K.U.Leuven
- **Academic positions:**
  - 01/01/2006-present: Associate professor (Statistics), Department of Mathematics and Computer Science, University of Southern Denmark, Odense, Denmark
  - 01/01/2006-present: Research Fellow, Faculty of Psychology and Educational Science (K.U. Leuven), research group on Quantitative Psychology and Individual Differences
  - 18/04/2005-31/12/2005: Postdoctoral researcher Faculty of Psychology and Educational Science (K.U.Leuven), research group on Quantitative Psychology and Individual Differences
  - 01/10/2001-30/09/2004: Postdoctoral position granted by F.W.O. Vlaanderen (Fund for Scientific Research – Flanders)
  - 01/10/2000-30/09/2001: Postdoctoral position funded by the K.U.Leuven, Department of Applied Economics, research group on Quantitative Methods, K.U.Leuven
  - 01/10/1994-30/09/2000: Research assistant, Department of Applied Economics, research group on Quantitative Methods, K.U.Leuven

- **Grants**
  - 2014-2017: Grant from the Villum Foundation, VKR023480 (1883700 krones $\approx$ 250000 Euro)
  - 2014: Visit grant awarded by Strasbourg University (1 month salary, professor level)
  - 2012: Visit grant awarded by Strasbourg University (1 month salary, professor level)
  - 01/10/2001-30/09/2004: Postdoctoral position funded by F.W.O. Vlaanderen (Fund for Scientific Research – Flanders)
- **Other professions:**
  - 01/10/2004-31/03/2005: ING Belgium, Credit Portfolio Group Modeler
- **Memberships:**
  - Belgian Statistical Society (BSS)
  - Danish Society for Theoretical Statistics (DSTS)
  - European Network for Business and Industrial Statistics (ENBIS)
- **Programming languages – statistical software:**
  - SAS
  - S-Plus/R
  - Fortran – NAG

2 Research

2.1 Research interests

- extreme value statistics: univariate, multivariate, and analysis of extreme values in regression settings
- asymptotic theory
- goodness-of-fit testing and diagnostic measures

2.2 Books

- Beirlant, J., Goegebeur, Y., Segers, J., Teugels, J.L., 2004. *Statistics of Extremes – Theory and Applications.* Wiley Series in Probability and Statistics.

2.3 Publications in reviewed international journals

1. Goegebeur, Y., Guillou, A., Ho, N.K.L., Qin, J., 2021. A Weissman-type estimator of the conditional marginal expected shortfall. Accepted for publication in *Econometrics and Statistics.*
2. Goegebeur, Y., Guillou, A., Ho, N.K.L., Qin, J., 2021. Conditional marginal expected shortfall. *Extremes*, **24**, 797–847.
3. Dierckx, G., Goegebeur, Y., Guillou, A., 2021. Local robust estimation of Pareto-type tails with random right censoring. *Sankhya A*, **83**, 70–108 .

4. Goegebeur, Y., Guillou, A., Qin, J., 2021. Extreme value estimation of the conditional risk premium in reinsurance. *Insurance: Mathematics and Economics*, **96**, 68–80.
5. Goegebeur, Y., Guillou, A., Ho, N.K.L., Qin, J., 2020. Robust estimation of the conditional tail dependence coefficient. Accepted for publication in *Journal of Multivariate Analysis*.
6. Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2020. Bias correction in conditional multivariate extremes. *Electronic Journal of Statistics*, **14**, 1773–1795.
7. Goegebeur, Y., Guillou, A., Qin, J., 2019. Robust estimation of the Pickands dependence function under random right censoring. *Insurance: Mathematics and Economics*, **87**, 101–114.
8. Goegebeur, Y., Guillou, A., Qin, J., 2019. Bias-corrected estimation for conditional Pareto-type distributions with random right censoring. *Extremes*, **22**, 459–498.
9. Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2018. Local robust estimation of the Pickands dependence function. *Annals of Statistics*, **46**, 2806–2843.
10. Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2018. Local estimation of the conditional stable tail dependence function. *Scandinavian Journal of Statistics*, **45**, 590–617.
11. Escobar-Bach, M., Goegebeur, Y., Guillou, A., You, A., 2017. Bias-corrected and robust estimation of the bivariate stable tail dependence function. *TEST*, **26**, 284–307.
12. Goegebeur, Y., Guillou, A., Qin, J., 2017. On kernel estimation of the second order rate parameter in multivariate extreme value statistics. *Statistics and Probability Letters*, **128**, 35–43.
13. Goegebeur, Y., Guillou, A., Osmann, M., 2017. A local moment type estimator for an extreme quantile in regression with random covariates. *Communications in Statistics – Theory and Methods*, **46**, 319–343.
14. de Wet, T., Goegebeur, Y., Guillou, A., Osmann, M., 2016. Kernel regression with Weibull-type tails. *Annals of the Institute of Statistical Mathematics*, **68**, 1135–1162.
15. Beirlant, J., Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2016. Bias-corrected estimation of stable tail dependence function. *Journal of Multivariate Analysis*, **143**, 453–466.
16. Dutang, C., Goegebeur, Y., Guillou, A., 2016. Robust and bias-corrected estimation of extreme failure sets. *Sankhya A*, **78**, 52–86.
17. Goegebeur, Y., Guillou, A., Stupfler, G., 2015. Uniform asymptotic properties of a nonparametric regression estimator of conditional tails. *Annales de l'Institut Henri Poincaré - Probabilités et Statistiques*, **51**, 1190–1213.
18. Goegebeur, Y., Guillou, A., Osmann, M., 2015. An estimator for the tail index of an integrated conditional Pareto-Weibull-type model. *Statistics and Probability Letters*, **103**, 8–16.
19. Goegebeur, Y., Guillou, A., Rietsch, T., 2015. Robust conditional Weibull-type estimation. *Annals of the Institute of Statistical Mathematics*, **67**, 479–514.
20. Dutang, C., Goegebeur, Y., Guillou, A., 2014. Robust and unbiased estimation of the coefficient of tail dependence. *Insurance: Mathematics and Economics*, **57**, 46–57.
21. Goegebeur, Y., Guillou, A., Osmann, M., 2014. A local moment type estimator for the extreme value index in regression with random covariates. *Canadian Journal of Statistics*, **42**, 487–507.

22. Dierckx, G., Goegebeur, Y., Guillou, A., 2014. Local robust and asymptotically unbiased estimation of conditional Pareto-type tails. *TEST*, **23**, 330–355.

23. Goegebeur, Y., Guillou, A., Schorgen, A., 2014. Nonparametric regression estimation of conditional tails - the random covariate case. *Statistics*, **48**, 732–755.

24. Goegebeur, Y., Guillou, A., Verster, A., 2014. Robust and asymptotically unbiased estimation of extreme quantiles for heavy tailed distributions. *Statistics and Probability Letters*, **87**, 108–114.

25. Dierckx, G., Goegebeur, Y., Guillou, A., 2013. An asymptotically unbiased minimum density power divergence estimator for the Pareto-tail index. *Journal of Multivariate Analysis*, **121**, 70–86.

26. Piosik, Z.M., Goegebeur, Y., Steffensen, R., Klitkou, L., Christiansen O.B., 2013. TNF-α levels are higher in plasma from early pregnancy in patients with secondary compared with primary recurrent miscarriage. *American Journal of Reproductive Immunology*, **70**, 347–358.

27. Ip, E.H., Molenberghs, G., Chen, S.H., Goegebeur, Y., De Boeck, P., 2013. Functionally unidimensional item response models for multivariate binary data. *Multivariate Behavioral Research*, **48**, 534–562.

28. Goegebeur, Y., Guillou, A., 2013. Asymptotically unbiased estimation of the coefficient of tail dependence. *Scandinavian Journal of Statistics*, **40**, 174–189.

29. de Wet, T., Goegebeur, Y., Guillou, A., 2012. Weighted moment estimators for the second order scale parameter. *Methodology and Computing in Applied Probability*, **14**, 753–783.

30. Goegebeur, Y., de Wet, T., 2012. Estimation of the third order parameter in extreme value statistics. *TEST*, **21**, 330-354.

31. Goegebeur, Y., de Wet, T., 2012. Local estimation of the second order parameter in extreme value statistics and local unbiased estimation of the tail index. *Communications in Statistics – Theory and Mehods*, **41**, 3575–3607.

32. de Wet, T., Goegebeur, Y., Munch, M., 2012. Asymptotically unbiased estimation of the second order tail parameter in extreme value statistics. *Statistics and Probability Letters*, **82**, 565-573.

33. Goegebeur, Y., Guillou, A. , 2011. A weighted mean excess function approach to the estimation of Weibull-type tails. *TEST*, **20**, 138–162.

34. Goegebeur, Y., Beirlant, J., de Wet, T. 2010. Kernel estimators for the second order parameter in extreme value statistics. *Journal of Statistical Planning and Inference*, **140**, 2632–2652.

35. Goegebeur, Y., Guillou, A., 2010. Goodness-of-fit testing for Weibull-type behavior. *Journal of Statistical Planning and Inference*, **140**, 1417-1436.

36. Jørgensen, B. , Goegebeur, Y., Martines, J.R., 2010. Dispersion models for extremes. *Extremes*, **13**, 399-437.

37. Goegebeur, Y., Beirlant, J., de Wet, T., 2010. Generalized kernel estimators for the Weibull tail coefficient. *Communications in Statistics – Theory and Methods*, **39**, 3695–3716.

38. Goegebeur, Y., De Boeck, P., Molenberghs, G., 2010. Person fit for test speededness: normal curvatures, likelihood ratio tests and empirical Bayes estimates. *Methodology*, **6**, 3-16.

39. Goegebeur, Y., Beirlant, J. and de Wet, T., 2008. Linking Pareto-tail kernel goodness-of-fit statistics with tail index at optimal threshold and second order estimation. *REVSTAT–Statistical Journal*, **6**, 51-69.

40. Goegebeur, Y., De Boeck, P., Wollack, J.A., Cohen, A.S., 2008. A speeded item response model with gradual process change. *Psychometrika*, **73**, 65-87.

41. Bang-Jensen, J., Chiarandini, M., Goegebeur, Y., Jørgensen, B., 2007. Mixed models for the analysis of local search components. In T. Stützle, M. Birattari, H. Hoos (Eds.), *Engineering Stochastic Local Search Algorithms: Designing, Implementing and Analyzing Effective Heuristics.* International Workshop, SLS 2007, vol. 4638 of Lecture Notes in Computer Science, pp. 91-105. Springer Verlag, Berlin, Germany.

42. Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2006. A local influence based diagnostic approach to a speeded IRT model. *Journal of the Royal Statistical Society, Series C, Applied Statistics*, **55**, 647-676.

43. Beirlant, J., de Wet, T., Goegebeur, Y., 2006. A goodness-of-fit statistic for Pareto-type behaviour. *Journal of Computational and Applied Mathematics*, **186**, 99-116.

44. Goegebeur, Y., Planchon, V., Beirlant, J, Oger, R., 2005. Quality assessment of pedochemical data using extreme value methodology. *Journal of Applied Science*, **5**, 1092-1102.

45. Beirlant, J., Goegebeur, Y., 2004. Local polynomial maximum likelihood estimation for Pareto-type distributions. *Journal of Multivariate Analysis*, **89**, 97-118.

46. Beirlant, J., Goegebeur, Y., 2004. Simultaneous tail index estimation. *REVSTAT–Statistical Journal*, **2**, 15-39.

47. Beirlant, J., Goegebeur, Y., 2004. Discussion of the paper 'A conditional approach for multivariate extreme values' by Janet E. Heffernan and Jonathan A. *Journal of the Royal Statistical Society, Series B*, **66**, 539.

48. Beirlant, J., de Wet, T., Goegebeur, Y., 2004. Nonparametric estimation of extreme conditional quantiles. *Journal of Statistical Computation and Simulation*, **74**, 567-580.

49. Beirlant, J., Goegebeur, Y., 2003. Discussion of the paper 'Statistical tests on tail index of a probability distribution' by Jana Jureckova. *Metron*, **61**, 175-180.

50. Beirlant, J., Goegebeur, Y., 2003. Regression with response distributions of Pareto-type. *Computational Statistics and Data Analysis*, **42**, 595-619.

51. Gelman, A., Goegebeur, Y., Tuerlinckx, F., Van Mechelen, I., 2000. Diagnostic checks for discrete-data regression models using posterior predicitive simulations. *Journal of the Royal Statistical Society, Series C, Applied Statistics*, **49**, 247-268.

52. Beirlant, J., Dierckx, G., Goegebeur, Y., Matthys, G., 1999. Tail index estimation and an exponential regression model. *Extremes*, **2**, 177-200.

53. Beirlant, J., Goegebeur, Y., Verlaak, R., Vynckier, P., 1998. Burr regression and portfolio segmentation. *Insurance: Mathematics and Economics*, **23**, 231-250.

2.4 Book chapters

- Chiarandini, M., Goegebeur, Y., 2009. Mixed Models for the Analysis of Optimization Algorithms. T. Bartz-Beielstein, M. Chiarandini, L. Paquete and M. Preuss (ed.). *Empirical Methods for the Analysis of Optimization Algorithms*, Springer, Berlin, Germany.

2.5 Research reports

- Goegebeur, Y., de Wet, T., 2011. On the estimation of higher order distributional parameters in extreme value statistics. Technical report.

- Goegebeur, Y., Goos, P., Vandebroek, M., 2007. A hierarchical Bayesian approach to robust parameter design. Research report nr 0719, Department of Decision Sciences and Information Management, K.U.Leuven. (Submitted Technometrics)

- Kukush, A., Beirlant, J., Goegebeur, Y., 2005. Nonparametric estimation of conditional quantiles. Research report nr 0557, Department of Applied Economics, K.U.Leuven. (Submitted Mathematical Methods of Statistics)

- Beirlant, J., Goegebeur, Y., 2003. Simultaneous tail index estimation. Research Report nr 0121, Department of Applied Economics, K.U.Leuven, 19pp.

- Beirlant, J., de Wet, T., Goegebeur, Y., 2003. A goodness-of-fit statistic for Pareto-type behaviour. Technical report, University Centre for Statistics, K.U.Leuven, 19pp.

- Beirlant, J., de Wet, T., Goegebeur, Y., 2002. Nonparametric estimation of extreme conditional quantiles. Technical report 2002-07, University Centre for Statistics, K.U.Leuven, 19pp.

- Goegebeur, Y., Planchon, V., Beirlant, J, Oger, R., 2002. Quality assessment of pedochemical data using extreme value methodology. Technical report 2002-08, University Centre for Statistics, K.U.Leuven, 14pp.

- Beirlant, J., Goegebeur, Y., 2000. Local polynomial maximum likelihood estimation for Pareto-type distributions. Research Report nr 0024, Department of Applied Economics, K.U.Leuven, 27 pp.

- Gochet, W., Goegebeur, Y., Maes, F., 1997. A method of classification based on the L1 norm. Research Report nr 9728, Department of Applied Economics, K.U.Leuven, 19 pp.

2.6 Other publications

- Gochet, W., Goegebeur, Y., Tistaert, J., 2001. Classificatiemodellen: klasseren of toepassen. *Business Inzicht*, **7**, March 2001.

2.7 International conferences

2.7.1 Published in proceedings

- Goegebeur, Y., de Wet, T., 2011. Estimation of the third order parameter in extreme value statistics. *58th Session of the ISI*, Dublin (Ireland), August, 21-26.

- Goegebeur, Y., Guillou, A., 2010. A weighted mean excess function approach to the estimation of Weibull-type tails. *International Workshop on Applied Probability (IWAP2010)*, Madrid (Spain), July, 5-8. (Invited contribution)

- Goegebeur, Y., Beirlant, J., de Wet, T., 2009. Kernel estimators for the second order parameter in extreme value statistics. *57th Session of the ISI*, Durban (South Africa), August, 16-22.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2008. Kernel goodness-of-fit statistics for Pareto-type behavior and threshold selection for tail index estimation. *International Workshop on Applied Probability (IWAP2008)*, Compiègnes (France), July, 7-10. (Invited contribution)

- Jørgensen, B., Goegebeur, Y., 2007. Dispersion models for extremes. *56th Session of the ISI*, Lisboa (Portugal), August, 22-29.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2007. Bias-corrected goodness-of-fit tests for Pareto-type behavior. *56th Session of the ISI*, Lisboa (Portugal), August, 22-29. (Invited contribution)

- Bang-Jensen, J., Chiarandini, M., Goegebeur, Y., Jørgensen, B., 2007. Mixed models for the analysis of local search components. In T. Stützle, M. Birattari, H. Hoos (Eds.), *Engineering Stochastic Local Search Algorithms: Designing, Implementing and Analyzing Effective Heuristics.* International Workshop, SLS 2007, vol. 4638 of Lecture Notes in Computer Science, pp. 91-105. Springer Verlag, Berlin, Germany.

- Goegebeur, Y., Hoedemakers, T., Tistaert, J., 2007. Synthetic CDO pricing using the Student t factor model with random recovery. *Third Brazilian Conference on Statistical Modelling in Insurance and Finance*, Maresias (Brazil), March 25-30.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2006. Goodness-of-fit testing and Pareto-tail estimation. *International Workshop on Applied Probability (IWAP2006)*, Connecticut, May, 15-18. (Invited contribution)

- Beirlant, J., de Wet T., Goegebeur, Y., 2004. A goodness-of-fit statistic for Pareto-type behaviour. *8th International Congress on Insurance: Mathematics and Economics*, Rome (Italy), June 14-16.

- Beirlant, J., de Wet, T., Goegebeur, Y., 2002. Nonparametric estimation of extreme conditional quantiles. *6th International Congress on Insurance: Mathematics and Economics*, Lisboa (Portugal), July 15-17.

- Beirlant, J., Goegebeur, Y., 2001. Simultaneous tail index estimation. *XXXIIIemes Journées de Statistique*, Nantes (France), May 14-18. (Invited contribution)

- Beirlant, J., Goegebeur, Y., 2000. Simultaneous extreme-value analysis of several Pareto-type tails. *2nd Congress on Mathematical Methods in Reliability*, p. 183-186, Bordeaux (France), July 4-7. (Invited contribution)

- Gochet, W., Goegebeur, Y., Maes, F., 1998. A method of classification based on the L1-norm. *Proceedings of the 6th Conference of the International Federation of Classification Societies*, p. 132-135, Rome (Italy), July 21-24.

2.7.2 Unpublished or available as abstract

- Goegebeur, Y., Guillou, A., Qin, J., 2021. Robust estimation of the conditional stable tail dependence function. *EVA 2021*, Edinburg (Scotland), June 28–July 2.

- Goegebeur, Y., Guillou, A., Qin, J., 2019. Robust estimation of the Pickands dependence function under random right censoring. *CMStatistics 2019*, London (UK), December 14–16.

- Goegebeur, Y., Guillou, A., Qin, J., Ho, N.K.L., 2019. Robust estimation of the conditional tail dependence coefficient. *EVA 2019*, Zagreb (Croatia), July 1–5.

- Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2019. Local robust estimation of the Pickands dependence function. *Two-day meeting of the Danish Society for Theoretical Statistics*, Odense (Denmark), April 9-10. (Invited contribution)
- Goegebeur, Y., Guillou, A., Qin, J., 2018. Bias-corrected estimation for conditional Pareto-type distributions with random right censoring. *CMStatistics 2018*, Pisa (Italy), December 14–16.
- Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2018. Local robust estimation of the Pickands dependence function. *ICORS 2018*, Leuven (Belgium), July 2-6.
- Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2016. Robust estimation of the conditional Pickands dependence function. *CMStatistics 2016*, Sevilla (Spain), December 9-11. (Invited contribution)
- Dutang, C., Goegebeur, Y., Guillou, A., 2015. Robust and bias-corrected estimation in multivariate extreme value statistics. *CMStatistics 2015*, London (UK), December 12-14. (Invited contribution)
- Dutang, C., Goegebeur, Y., Armelle, G., 2014. Robust and bias-corrected estimation of the coefficient of tail dependence. *IWAP 2014*, Antalya (Turkey), June 16-19. (Invited contribution)
- Dierckx, G., Goegebeur, Y., Guillou, A., 2013. Local robust and asymptotically unbiased estimation of conditional Pareto-type tails. *EVA 2013*, Shanghai (China), July 8-12. (Invited contribution)
- Dierckx, G., Goegebeur, Y., Guillou, A., 2013. Local robust and asymptotically unbiased estimation of conditional Pareto-type tails. Workshop *Extremes in space and time*, Copenhagen (Denmark), May 31. (Invited contribution).
- Goegebeur, Y., de Wet, T., Guillou, A., 2012. Kernel regression with Weibull-type tails. *ERCIM 2012*, Oviedo (Spain), December 1-3. (Invited contribution)
- Goegebeur, Y., Guillou, A., Schorgen, A., 2012. Nonparametric regression estimation of conditional tails - the random covariate case. *IWAP 2012*, Jerusalem (Israel), June 11-14.
- de Wet, T., Goegebeur, Y., 2010. Local unbiased estimation of the tail index and its application to fire insurance data. *ISBIS-2010*, Portorose (Slovenia), July 5-9. (Invited contribution)
- Goegebeur, Y., Beirlant, J., de Wet, T., 2009. Kernel estimators for the second order parameter in extreme value statistics. *Two-day meeting of the Danish Society for Theoretical Statistics*, Odense (Denmark), November 3-4. (Invited contribution)
- Goegebeur, Y., De Boeck, P., Molenberghs, G. and del Pino, G., 2007. A local influence based diagnostic approach to a speeded item response theory model. *Annual Meeting of the 'Sociaal Wetenschappelijke Sectie van de Vereniging voor Statistiek'*, Tilburg University, Tilburg (The Netherlands), September 26. (Invited contribution)
- Goegebeur, Y., Beirlant, J., de Wet, T., 2007. Bias-corrected goodness-of-fit tests for Pareto-type behavior. *Workshop on Statistical Inference for Dependent Data*, Hasselt (Belgium), April 26-27. (Invited contribution)
- Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2007. A local influence based diagnostic approach to a speeded IRT model. *Workshop on Statistical Inference for Dependent Data*, Hasselt (Belgium), April 26-27, 2007. (Invited contribution)
- Goegebeur, Y., Beirlant, J., de Wet, T., 2006. Goodness-of-fit testing and Pareto-tail estimation. *Two-day meeting of the Danish Society for Theoretical Statistics*, Copenhagen (Denmark), November 7-8. (Invited contribution)

- Goegebeur, Y., Beirlant, J., de Wet, T., 2006. Goodness-of-fit testing and Pareto-tail estimation. *Joint Statistical Meetings*, Seattle (Washington), August 6-10.
- Goegebeur, Y., Beirlant, J., de Wet, T., 2006. Goodness-of-fit testing and Pareto-tail estimation. *Nordstat*, Skorping (Denmark), June 11-15.
- Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2005. A local influence based diagnostic approach to a speeded IRT model. *15th International IOPS Conference*, Leuven (Belgium), December 15-16. (Invited contribution)
- Goegebeur, Y., De Boeck, P., Molenberghs, G., Verbeke, G., 2005. Local influence analysis of non-response in a speeded IRT model. *Workshop on Statistical Techniques and Modeling for Complex Substantive Questions with Complex Data*, K.U.Leuven, Leuven (Belgium), September 30.
- De Boeck, P., Goegebeur, Y., Wollack, J., Cohen, A., 2005. A model for gradual process change. *International Meeting of the Psychometric Society*, Tilburg (The Netherlands), July 4-9.
- Goegebeur, Y., 2003. Extremes and Regression Models. *Aon Re Europe Science Team Meeting*, EURANDOM, Eindhoven University of Technology, Eindhoven (The Netherlands), September 18-19. (Invited contribution)
- Beirlant, J., de Wet, T., Goegebeur, Y., 2003. A goodness-of-fit statistic for Pareto-type behaviour. *Workshop on statistical modeling for complex data*, Diepenbeek (Belgium), March 31-April 2.
- Goegebeur, Y., 2001. Analysis of extremes and regression models. *International Symposium Extreme Value Analysis – Theory and Practice*, Leuven (Belgium), August 5-10. (Invited contribution)

2.7.3 Poster presentations

- Beirlant, J., Goegebeur, Y., Planchon, V., 2002. Outlier detection of pedological data using extreme value methodology. *Workshop Statistical Modelling and Inference for Complex Data Structures*, Louvain-la-Neuve (Belgium), May 21-23.

2.7.4 Discussant activities

- Invited by Holger Drees for the session on Dependence in Extremes at the *24th European Meeting of Statisticians*, Prague, August 19-23, 2002.

2.7.5 Chair of sessions

- Organiser of the session 'Modern Topics in Statistics of Extremes' at *CMStatistics 2019*, London (UK), December 14-16.
- Chair of the session 'Conditional extremes' at the *EVA 2019*, Zagreb (Croatia), July 1-5.
- Chair of the session 'Contributions in extreme values' at *CMStatistics 2018*, Pisa (Italy), December 14-16.
- Chair of the session 'Contributions in extremes and their applications' at *CMStatistics 2016*, Seville (Spain), December 9-11.
- Chair of the session 'Asymptotics' at the *EVA2013*, Shanghai (China), July 8-12.2013.
- Chair of the session 'Extreme value distributions' at the *57th Session of the ISI*, Durban (South Africa), August 16-11, 2009.

2.7.6 Short courses

- Goegebeur, Y., Purcaru, O., 2003. Modelling dependence through copulas. *First Brazilian Conference on Statistical Modelling in Insurance and Finance*, Ubatuba (Brazil), September 1-6. (invited contribution)

2.7.7 Memberships

- Advisory board of the *Workshop on Experimental Methods for the Assessment of Computational Systems*, Krakow (Poland), September 11, 2010.
- Member of the organizing committee of the *First Brazilian Conference on Statistical Modelling in Insurance and Finance*, Ubatuba (Brazil), September 1-6, 2003.

2.8 Other/national conferences and scientific meetings

2.8.1 Published in proceedings

- Beirlant, J., Goegebeur, Y., 2001. Nonparametric analysis of conditional tails. *SAS Annual User Conference – Belgium and Luxemburg*, Haasrode (Belgium), October 4. (invited contribution)

2.8.2 Unpublished or available as abstract

- Goegebeur, Y., Guillou, A., Khanh le Ho, N., Qin, J., 2020. Conditional marginal expected shortfall. Seminar for the Department of Mathematics, Catholic University of Leuven, November 26.
- Beirlant, J., Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2015. Bias-corrected estimation of the stable tail dependence function. Mathematics colloquium, Department of Mathematics and Computer Science, University of Southern Denmark, November 27.
- Beirlant, J., Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2015. Bias-corrected estimation of the stable tail dependence function. Seminar given at the Department of Statistics and OR, University of Vienna, November 16.
- Dutang, C., Escobar-Bach, M., Goegebeur, Y., Guillou, A., 2015. Estimation of dependence in multivariate extremes. Seminar given at the Department of Statistics and OR, University of Vienna, May 7.
- Dutang, C., Goegebeur, Y., Guillou, A., 2014. Robust and bias-corrected estimation of the coefficient of tail dependence. Seminar given at the Centre for Mathematical Sciences, Mathematical Statistics, Lund University, May 9.
- Dierckx, G., Goegebeur, Y., Guillou, A., 2013. Local robust and asymptotically unbiased estimation of conditional Pareto-type tails. Seminar given at the Department of Biostatistics, University of Southern Denmark, April 30.
- Goegebeur, Y., de Wet, T., Guillou, A., Osmann, M., 2012. Kernel regression with Weibull-type tails. Seminar given at the Department of Biostatistics, University of Southern Denmark, October 23.
- Goegebeur, Y., Guillou, A., Schorgen, A., 2012. Nonparametric analysis of Pareto-type tails with random covariates. Seminar given at the Department of Mathematics, Strasbourg University, March 22.

- Goegebeur, Y., Guillou, A., Schorgen, A., 2012. Nonparametric analysis of Pareto-type tails with random covariates. Seminar given in the Journal Club, Department of Mathematics, University of Southern Denmark, March 8.

- Goegebeur, Y., Guillou, A., Schorgen, A., 2012. Nonparametric regression analysis of extreme values. Seminar given at the Technical faculty, University of Southern Denmark, February 28.

- Goegebeur, Y., 2011. Kernel estimators for the second order parameter in extreme value statistics. Seminar given at the Department of Mathematics, Strasbourg University, March 22.

- Goegebeur, Y., 2010. On the estimation of Weibull-type tails. Seminar given at the Department of Statistics, SDU, June 15.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2009. Kernel estimators for the second order parameter in extreme value statistics. Seminar given at the Centre for Mathematical Sciences, Mathematical Statistics, Lund University, November 20.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2009. Kernel estimators for the second order parameter in extreme value statistics. Seminar given at the Department of Statistics and Actuarial Science, University of Stellenbosch, August 14.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2009. Kernel estimators for the second order parameter in extreme value statistics. Seminar given at the Department of Statistics, SDU, April 21.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2008. Kernel goodness-of-fit statistics for Pareto-type behavior. Seminar given at the Department of Statistics, SDU, June 24.

- Goegebeur, Y., Beirlant, J., de Wet, T., 2007. Goodness of fit-based threshold selection in extreme value statistics. Retreat day Department of Statistics, January 9.

- Goegebeur, Y., 2006. Goodness-of-fit testing and Pareto-tail estimation. Seminar given in the Department of Statistics, University of Southern Denmark, May 30.

- Goegebeur, Y., De Boeck, P., Wollack, J.A., Cohen, A.S., 2006. Een IRT model met geleidelijke proceswijziging (An IRT model for gradual process change). *Onderwijsresearch dagen*, Amsterdam (The Netherlands), May, 10-12. (Invited contribution)

- Goegebeur, Y., 2006. Extremes and regression models – an introduction to extreme value statistics. Seminar given for the epidemiology group, University of Southern Denmark, March 30.

- Goegebeur, Y., Ip, E., De Boeck, P. and Molenberghs, G., 2006. Residual dependencies in random effects regression models. Retreat day Department of Statistics, January 30.

- Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2005. A local influence based diagnostic approach to a speeded IRT model. Seminar given in the Department of Statistics, University of Southern Denmark, November 14.

- Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2005. A local influence based diagnostic approach to a speeded IRT model. Seminar given in the Department of Mathematics, K.U.Leuven, October 7.

- Goegebeur, Y., De Boeck, P., Molenberghs, G., del Pino, G., 2005. Local influence analysis of non-response in a speeded IRT model. Seminar given in the Department of Mathematics, Pontificia Universidad Católica de Chile, September 21.

- Beirlant, J., Goegebeur, Y., 2001. Analysis of extremes and regression models. Theme-day on extreme value statistics organized by the University Centre for Statistics and the research group Applied Mathematics, K.U.Leuven (Belgium), May 9. (invited contribution)
- Beirlant, J, Goegebeur, Y., 2000. Analysis of extremes and regression models. Joint statistics and econometrics seminar, Institut de Statistique, U.C.L. (Belgium), October 20. (invited contribution)
- Beirlant, J., Goegebeur, Y., 1999. Regression with response distributions of Pareto-type. *7th annual meeting of the Belgian Statistical Society*, Nieuwpoort (Belgium), October 7-8.
- Beirlant, J., Dierckx, G., Goegebeur, Y., 1999. Linear models in extreme value modelling. *Colloquium "Current Issues in Statistics"*, University Centre for Statistics, K.U.Leuven (Belgium), April 29-30.
- Beirlant, J., Goegebeur, Y., 1999. Linear models in extreme-value statistics: the one-way layout. University Centre for Statistics, L.U.C. Diepenbeek (Belgium), March 10. (invited contribution)
- Beirlant, J., Dierckx, G., Goegebeur, Y., 1999, Linear models in extreme-value statistics. University Centre for Statistics, K.U.Leuven (Belgium), January 13.

2.9 Papers in preparation

- Goegebeur, Y., Guillou, A. Qin, J., 2020. Robust estimation of the conditional stable tail dependence function.
- Goegebeur, Y., Guillou, A., Ho, N.K.L., Qin, J., 2020. Conditional generalised marginal mean excess.
- Daouia, A., Goegebeur, Y., Wilson, P.W., 2016. Hyperbolic graph efficiency assessment and statistics of extremes. (in preparation)
- Daouia, A., Goegebeur, Y., Guillou, A., 2016. Robust and efficient estimation of a support extremity via minimum density power divergence. (in preparation)

2.10 Dissemination of science

- Goegebeur, Y., 2013. Extreme value statistics. Talk given for high school students, October 25.
- Goegebeur, Y., 2013. Weighted and unbiased estimation in extreme value statistics. Talk given for the Danish Mathematical Society. Odense, May 17.
- Goegebeur, Y., 2010. Weighted estimation in extreme value statistics. Talk given for high school teachers, Science day at SDU, November 3.
- Goegebeur, Y., 2010. Statistical classification methods – an application to credit risk scoring. Talk given for high school students, October 28.
- Goegebeur, Y., 2009. Statistical classification methods – an application to credit risk scoring. Talk given at the IT&Datamanagement arrangement, December 14.

2.11 Referee activities

- Annales de l'Institut Henri Poincaré (B) Probabilités et Statistiques
- Annals of Applied Statistics
- Annals of Statistics
- Australian and New Zealand Journal of Statistics
- Behavior Research Methods
- Bernoulli
- Brazilian Journal of Probability and Statistics
- Columbian Journal of Statistics
- Communications in Statistics – Theory and Methods
- Computational Statistics and Data Analysis
- Econometrics and Statistics
- Electronic Journal of Statistics
- ESAIM: Probability and Statistics
- Extremes
- Festschrift in honor of Paul Deheuvels
- Insurance: Mathematics and Economics
- International Statistical Review
- International Journal of Computer Mathematics
- Journal of Applied and Computational Mathematics
- Journal of Computational and Graphical Statistics
- Journal of Emerging Market Finance
- Journal of Multivariate Analysis
- Journal of Nonparametric Statistics
- Journal of Statistical Computation and Simulation
- Journal of Statistical Planning and Inference
- Journal of Statistical Theory and Practice
- Journal of the Royal Statistical Society, Series B
- Methodology
- Psychometrika

- Quality and Reliability Engineering International
- REVSTAT
- Sankhya
- Scandinavian Journal of Statistics
- South African Statistical Journal
- Statistica Neerlandica
- Statistics
- Statistics & Decisions
- Statistics and Probability Letters
- Statistica Sinica
- TEST

2.12 Referee activities for research foundations

- 2014: External referee for the South African National Research Foundation
- 2011: External referee for the South African National Research Foundation

2.13 Scientific visits

- June 11 – June 14, 2019: Université de Strasbourg, Institut Recherche Mathématique Avancée, Prof. A. Guillou
- February – December, 2015: University of Vienna, Department of Statistics and Operations Research, Prof. G. Pflug
- March 22 – March 28, 2014: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- March 14 – March 21, 2014: University of the Free State, Department of Mathematical Statistics and Actuarial Science, Prof. A. Verster
- January 5 – January 17, 2014: Université de Strasbourg, Institut Recherche Mathématique Avancée, Prof. A. Guillou
- July 13 – July 27, 2012: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- March 13 – March 27, 2012: Université de Strasbourg, Institut Recherche Mathématique Avancée, Prof. A. Guillou
- March 15 – March 29, 2011: Université de Strasbourg, Institut Recherche Mathématique Avancée, Prof. A. Guillou
- January 10 – January 27, 2011: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet

- January 16 – January 30, 2010: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- August 7 – August 16, 2009: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- January 3 – January 17, 2009: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- July 2 – July 16, 2007: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- September 3 – September 23, 2005: Pontificia Universidad Católica de Chile, Department of Statistics, Prof. G. Del Pino
- June 14 – June 26, 2003: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- January 8 – February 12, 2003: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet
- January 2002: University of Stellenbosch, Department of Statistics and Actuarial Science, Prof. T. de Wet

2.14 Supervision of students

2.14.1 Ph.D. committees

- Chairman of the PhD committee for the evaluation of the dissertation 'Methods to analyse sparse demographics data: from Bayesian inference to agent-based modelling' by Fransisco Villavicencio (2017).
- Chairman of the PhD committee for the evaluation of the dissertation 'Random Effects Models with Applications in Fisheries Research' by René Holst (2010).

2.14.2 Ph.D. students

- Nguyen Khan le Ho, 2018-2022 (Jointly with Jing Qin and Armelle Guillou).
- Anthony Medford, 2015-2018 (jointly with James Vaupel).
- Mikael Escobar-Bach, 2014-2017 (jointly with Armelle Guillou).
- Michael Osmann, 2012-2015 (jointly with Armelle Guillou).

2.14.3 Master students

- Peter Bjørn, 2022. Estimation of the marginal mean excess. Master in Applied Mathematics, 60 ECTS.
- Tine Pedersen, 2021. Estimation of the conditional tail moment for heavy-tailed distributions with application to non-life insurance. Master in Mathematics-Economics, 30 ECTS.
- Nguyen Khan le Ho, 2020. Estimation of dependence in multivariate extreme statistics. Master in Applied Mathematics, 60 ECTS (Jointly with Jing Qin and Armelle Guillou).

- Amir Zoet, 2019. Bias-corrected estimation of the stable tail dependence function. Master in Mathematics, 30 ECTS.
- Michael Osmann, 2012. Estimation of Tail Dependence with Application to Twin Data. Master in Applied Mathematics, 60 ECTS (The thesis got the reward of best master thesis in mathematics in Denmark from the Danish Mathematical Society).
- Niels Christian Jørgensen, 2009. Analysis of Mass Spectra. Master in Applied Statistics, 30 ECTS.
- Michal Jerzy Krawczyk, 2007. An automated potentiometric tongue (ET) employing sequential injection analysis (SIA). M.Sc.Eng in Chemistry, 30 ECTS (jointly with Jens Jørgen Lønsmann Iversen).

2.14.4 Bachelor students

- Ida Overvad Bruun, 2021. Estimation of extreme quantiles for heavy tailed distributions, with application to insurance data. (spring 2021)
- Kimberly Eve Frimann Flindt-Petersen, 2021. Estimation of extreme quantiles for heavy tailed distributions, with application to insurance data. (spring 2021)
- Peter Bjørn, 2020. The distribution of the total claim amount in insurance.
- Caroline Thingholm Thorarinsson, 2020. Heavy tailed distributions in insurance.
- Tine Pedersen, 2019. Extreme value statistics and reinsurance pricing.
- Signe Herstal, 2019. Extreme value statistics and reinsurance pricing.
- Abdullah Rashad Ahmad, 2019. Analysis of tail dependence and reinsurance pricing.
- Maija Bindzus, 2018. Extreme value theory and estimation of the extreme value index.
- Ulrik Christensen, 2016. Construction of optimal hypothesis test.
- Maria Munch, 2011. Weighted estimation of the second order parameter in extreme value statistics.
- Michael Osmann, 2010. Kernel estimation of Weibull-type tails.
- Lena Erbs, 2009. Analyse af bivariate binære stokastiske variable med anvedelser i tvillingestudier. (jointly with Jacob Hjelmborg)

3 Teaching

3.1 Current teaching workload at the University of Southern Denmark

- MM544/MM835 Probability Theory (10 ECTS)
- ST522/ST816 Computational Statistics (10 ETCS)
- ST803: Extreme Value Statistics (5 ECTS)
- ST812: Order Statistics (5 ECTS)

3.2 Other teaching experience

- 2020: supervisor of individual study activity ‘The distribution of the total claim amount in insurance’
- 2015: Seminar in Statistics for master studies, University of Vienna (5 ECTS)
- 2012-2014: ST808 Multivariate Data Analysis and Chemometrics (5 ECTS)
- 2006-2012: ST502 Statistical modelling (5 ETCS)
- 2010-2012: ST515 Generalized linear models (5 ECTS)
- 2010, 2011: supervisor of individual study activity ‘Order statistics’
- 2010, 2011: supervisor of individual study activity ‘Extreme value statistics’
- 2010: supervisor of individual study activity ‘Statistical R programming’
- 2011: ST514 Multivariate statistical analysis (5 ECTS)
- 2006-2010: ST504 Prediction and classification (5 ECTS)
- 2006-2010: ST507 Statistical design and analysis of experiments (5 ECTS)
- 2006-2009: ST02 Multivariate data analysis and chemometrics (5 ETCS)
- 2005-2006: coordinator PhD course ‘Analysis of Interval-Censored Survival Data’ (reading group on the book of the same name written by Philip Hougaard, to appear: Springer).
- 2003-2004: course ‘Beginselen van Statistiek met inbegrip van IKZ’ (35h), K.U.Leuven, Faculty of Applied Sciences, Master in safety engineering.
- 2003: short course ‘Modelling dependence through copulas’. *First Brazilian Conference on Statistical Modelling in Insurance and Finance*, Ubatuba (Brazil), September 1-6. (invited contribution)
- 2000-2001: course ”Business Statistics” (30h), M.B.A. program Vlerick Leuven Gent Management School, Belgium
- 1994-2000: during my position as research assistant at the K.U.Leuven I assisted Prof. W. Gochet to the courses ‘Business Statistics in the undergraduate program Commercial Engineer and in the different graduate programs of the Department of Applied Economics

4 Participation in committees

- Member of the ‘censorkorps’ in statistics (external examiner in statistics for Denmark, 2018-)
- Chairman of the PhD committee of the Department of Mathematics and Computer Science, University of Southern Denmark (2022-)
- Chairman of the assessment committee for hiring assistant and associate professors in statistics, University of Southern Denmark (fall 2020)
- Interim chairman of the PhD committee of the Department of Mathematics and Computer Science, University of Southern Denmark (fall 2017)

- Member of the teaching committee of the Department of Mathematics and Computer Science, University of Southern Denmark (2013-)
- Member of the PhD committee of the Department of Mathematics and Computer Science, University of Southern Denmark (2014-)
- Chairman of the PhD committee of the Department of Mathematics and Computer Science, University of Southern Denmark (2008-2013)
- Committee member for the Mathematics-Economics education, University of Southern Denmark (2006-)

5 Referees

- Jan Beirlant
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