

Johan Segers - Curriculum Vitae

Full Professor, KU Leuven
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guest professor, UCLouvain

IMS Fellow, Institute for Mathematical Statistics

Elected member, International Statistical Institute

Prix Adolphe Wetrems–Sciences mathématiques et physiques (87e période annuelle, 1er février 2012 - 31 janvier 2013), Académie Royale des Sciences, des Lettres et des Beaux-arts de Belgique.

Research Director, Institute of Statistics, Biostatistics and Actuarial Sciences, UCLouvain, 2022–2025.

President, Louvain School of Statistics, Biostatistics and Actuarial Sciences, UCLouvain, 2015–2021.

Career

Full Professor, KU Leuven, Department of Mathematics, from 2024-09-01.

Full Professor, UCLouvain, Institut de Statistique, Biostatistique et Sciences Actuarielles, from 2016-10-01. Chargé de cours à titre temporaire from 2006-09-01 to 2009-08-31; Chargé de cours à titre définitif from 2009-09-01 to 2011-09-30; Professeur from 2011-10-01 to 2016-09-30; Professeur ordinaire from 2016-10-01 to 2024-08-31; Guest professor since 2024-09-01.

Assistant professor, Tilburg University, Department of Econometrics and OR, from 2003-01-01 to 2006-08-31 (CentER Extramural Fellow until 2020).

Postdoctoral researcher, Technische Universiteit Eindhoven, EURANDOM, from 2002-01-01 to 2002-12-31.

Postdoctoral researcher, Chalmers University of Technology (Gothenburg), Department of Mathematics, from 2001-09-01 to 2001-12-31.

Doctoral researcher, KU Leuven, Department of Mathematics, from 1997-09-01 to 2001-08-31.

Education

PhD in Mathematics, KU Leuven, 2001-05-09. Thesis: *Extremes of a Random Sample: Limit Theorems and Applications*. Supervisor: JOZEF L. TEUGELS.

Licentiaat in Mathematics, KU Leuven, 1997-07-05. Supervisor: ALFONS VAN DAELE.

Kandidaat in Mathematics/Physics, Limburgs Universitair Centrum, 1995-07-10.

Publications

Author or co-author of 1 book and 92 articles in international scientific journals with peer review. Full list at the end.

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=7003890100>, 2469 citations, *h-index* 25 (16 Sep 2023)

ORCID: <https://orcid.org/0000-0002-0444-689X>

Google scholar: <https://scholar.google.be/citations?user=fA6rT1sAAAAJ>

arXiv: http://arxiv.org/find/all/1/au:+Segers_Johan/0/1/0/all/0/1

Editorial boards

Associate Editor for the following international scientific peer-reviewed scientific journals:

Electronic Journal of Statistics (2019–...)

The Annals of Statistics (2019–...)

Journal of the Royal Statistical Society: Series B (2005–2009, 2014–2018)

Bernoulli (2010–2018)

Extremes (2012–...)

Journal of Applied Probability (2010–2015)

Advances in Applied Probability (2010–2015)

Stochastic Processes and Their Applications (2010–2012)

Journal of Statistical Planning and Inference (2012–2014)

Research grants

Networks

Action de Recherche Concertée, Académie universitaire de Louvain, "EXtreme weather Attribution at mid- and high-Latitudes using advanced statistical Techniques (EXALT)" (2024–2019). promotor.

Appel à projets générique ANR 2023, Agence Nationale de la Recherche, "EXtremes, STatistical learning and Applications" EXSTA (2024–2028).

Action de Recherche Concertée, Académie universitaire de Louvain, "Stochastic modelling of dependence: Systems under stress" (2012–2017). Main promotor.

Interuniversity Attraction Pole, Phase VII, Belgian Science Policy (Belspo), "Developing crucial Statistical methods for Understanding major complex Dynamic Systems in natural, biomedical and social sciences (StUDyS)" P7/06 (2012–2017).

Appel à projets générique ANR 2014, Agence Nationale de la Recherche, "Analysis of Multivariate Extremes and RISKS Assessment" AMERISKA (2015–2016).

Wetenschappelijke Onderzoeksgemeenschap, Research Foundation - Flanders (FWO), "Asymptotic Theory for Multidimensional Statistics" (2012–2017).

Wetenschappelijke Onderzoeksgemeenschap, Research Foundation - Flanders (FWO), "Stochastic modelling with applications in financial markets" (2011–2015).

Action de Recherche Concertée, Académie universitaire de Louvain, "Econometric modelling of multivariate financial time series" 07/12/002 (2007–2012).

Interuniversity Attraction Pole, Phase VI, Belgian Science Policy (Belspo), "Statistical Analysis of Association and Dependence in Complex Data" P6/03 (2007–2011).

Personal grants

FRIA for Stéphane Lhaut, F.R.S.-FNRS, from 2022-09-01 to 2026-08-31.

Projet de recherche, F.R.S.-FNRS, from 2021-01-01 to 2024-12-31. Principal Investigator.

Grant for Aigerim Zhuman, National Bank of Belgium, from 2020-09-01 to 2023-08-31.

Crédit de recherche, F.R.S.-FNRS, from 2019-01-01 to 2021-12-31. Principal Investigator.

Wetenschappelijke Onderzoeksgemeenschap (WOG), FWO Vlaanderen, from 2017-01-01 to 2021-31-12.

Projet de recherche, F.R.S.-FNRS, from 2014-07-01 to 2016-06-30. Principal Investigator.

FRIA for Anna Kiriliouk, F.R.S.-FNRS, from 2013-09-01 to 2017-08-31.

Mandat d'aspirant for Michał Warchol, F.R.S.-FNRS, from 2013-09-01 to 2017-08-31.

Open Competition, Netherlands Organisation for Scientific Research (NWO), from 2005-09-01 to 2009-08-31.

Vernieuwingsimpuls (VENI), Netherlands Organisation for Scientific Research (NWO), from 2004-10-01 to 2006-08-31.

Postdoctoral researcher, Research Foundation - Flanders (FWO), from 2001-09-01 to 2004-08-31.

Doctoral researcher, Research Foundation - Flanders (FWO), from 1997-09-01 to 2001-08-31.

PhD students

Mathematics Genealogy Project

KAMAL GASSER, "Analysis and attribution of European heatwaves", UCLouvain (in progress).

ANAS MOURAHIB, "Sparse multivariate generalized Pareto distributions for multivariate peaks-over-thresholds", UCLouvain (in progress).

STÉPHANE LHAUT, "Sampling theory for the empirical angular Wasserstein distance: learning from multivariate extremes", UCLouvain (in progress).

AIGERIM ZHUMAN, "Control variates for simultaneous Monte Carlo integration of a large number of functions", UCLouvain 2024-10-18.

STEFKA ASENOVA, "Extremes and graphical models", UCLouvain 2023-02-21.

GILLES MORDANT, "Transporting probability measures", UCLouvain 2021-08-23.

NATHAN UYTENDAELE, "Inference for hierarchical and graphical copula structures", UCLouvain 2016-12-21.

ANNA KIRILIOUK, "Non-linear tail dependence models", UCLouvain 2016-08-26.

MICHAŁ WARCHOL, "Time-series models for multivariate extremes", UCLouvain 2016-08-26.

GORDON GUDENDORF, "Nonparametric estimation of multivariate extreme-value copulas", UCLouvain 2012-09-04.

THOMAS MEINGUET, "Extreme-value theory for stationary stochastic processes", UCLouvain 2010-08-31.

ANDREA KRAJINA, "Modelling extremes in high dimensions", Tilburg University 2010-04-23 (as copromotor).

ELISABETH JOOSSENS, "Extreme value statistics: Second-order models and applications to metal fatigue", KU Leuven 2006-06-22 (as copromotor).

Scientific committees

Evaluation Committees

Institut Camille Jordan, Université Claude Bernard Lyon 1, HCERES December 15-17, 2014.

Habilitation à Diriger des Recherches

ANNE SABOURIN, "Extreme value theory and machine learning", Institut Polytechnique de Paris 2021-10-27.

ELENA DI BERNARDINO, "Contributions to multivariate risk models", Université Pierre et Marie Curie 2017-09-13.

MATHIEU RIBATET, "Contributions à la géostatistique des valeurs extrêmes", Université de Montpellier 2016-11-25.

SALIM BOUZEBDA, "Contribution à l'inférence statistique non-paramétrique et semi-paramétrique: processus empirique, bootstrap et copules", Université de Technologie de Compiègne 2014-10-16.

OLIVIER WINTENBERGER, "Contributions à la statistique des processus : estimation, prédiction et extrêmes", Université Paris-Dauphine 2012-11-23.

International scientific conferences

EURANDOM 25th Anniversary Workshop, Eindhoven 2024. *13th International Conference on Extreme Value Analysis*, Milan 2023. *ISBA 30th Anniversary Workshop*, Louvain-la-Neuve 2022. *12th International Conference on Extreme Value Analysis (Chair of the Scientific Committee)*, Edinburgh 2021. *11th International Conference on Extreme Value Analysis*, Zagreb 2019. *Flexible Statistical Modelling: Past, Present, and Future*, Gent 2016. *23th Meeting of the Belgian Statistical Society*, Antwerp 2015. *22th Meeting of the Belgian Statistical Society*, Louvain-la-Neuve 2014. *25th Anniversary of LStat*, Leuven 2013. *6th International Conference of the ERCIM WG on Computing and Statistics*, London 2013. *18th European Young Statisticians Meeting*, Osijek 2013. *5th International Conference of the ERCIM WG on Computing and Statistics*, Ovideo 2012. *6th PhD Day of the Ecole Doctorale Thématique in Statistics and Actuarial Sciences*, Louvain-la-Neuve 2012. *Quantitative methods in statistics, biostatistics and actuarial sciences*, Louvain-la-Neuve 2012. *44èmes Journées de Statistique de la Société Française de Statistique*, Brussels 2012. *7th Conference on Extreme Value Analysis*, Toulouse 2011. *Econometric and statistical modelling of multivariate time series*, Louvain-la-Neuve 2011. *4th Conference on Extreme Value Analysis*, Gothenburg 2005.

Refereeing

For funding agencies

Austrian Science Fund

Fonds de la Recherche Scientifique - FNRS

National Security Agency

Natural Environment Research Council

Croatian Science Foundation

Central Research Committee of the Free University of Bozen-Bolzano

Italian Evaluation of Research Quality exercise (VQR 2004-2010)

For book series

Wiley Series in Probability and Statistics

For peer-reviewed scientific journals

Advances in Applied Probability; Advances in Statistical Analysis; Annals of Applied Probability; Annals of Statistics; Australian and New Zealand Journal for Statistics; Belgian Actuarial Bulletin; Bernoulli; Biometrika; Canadian Journal of Statistics; Communications in Statistics - Simulation and Computation; Computational Statistics and Data Analysis; ESAIM Probability and Statistics; Electronic Journal of Statistics; European Journal of Finance; Extremes; International Journal of Mathematical Modelling and Numerical Optimisation; International Journal of Theoretical and Applied Finance; International Journal of Statistics and Management Systems; Journal of Applied Probability; Journal of the American Statistical Association, Theory and Methods; Journal of Econometrics; Journal of Empirical Finance; Journal of Financial Econometrics; Journal of Multivariate Analysis; Journal of the Royal Statistical Society, Series A; Journal of Statistical Planning and Inference; Journal of Time Series Analysis; Kybernetika; Latin American Journal of Probability and Mathematical Statistics; Lithuanian Mathematical Journal; Methodology and Computing in Applied Probability; Metrika; Probability Theory and Related Fields; Quantitative Finance; Scandinavian Journal of Statistics; Stat; Statistical Science; Statistics; Statistics and Probability Letters; Stochastic Processes and Their Applications; Technometrics; Theory and Decision.

Reviewer for *Mathematical Reviews* since 2023

Scientific society memberships

Bernoulli Society (treasurer 2021–2025)

International Statistical Institute (Elected member)

Institute for Mathematical Statistics (President of the Joint IMS/Bernoulli Publication Management Committee, 2018)

Belgian Statistical Society

Netherlands Society of Statistics and Operations Research, Section Mathematical Statistics (secretary and treasurer 2005–2008)

Invited talks

At international scientific conferences

Leuven Statistics Days, Leuven 2025. *Graph Laplacians, multivariate extremes and algebraic statistics (Eurandom, Technical University Eindhoven)*, Eindhoven 2024. *11th World Congress in Probability and Statistics*, Bochum 2024. *EXSTA Kick-Off*, MAP5, Université Paris cité, Paris 2024. *Virtual CRG Workshop*, KAUST and Université de Genève, (online) 2024. *New Perspectives in the Theory of Extreme Values*, Dubrovnik 2023. *RSSB 2023*, Louvain-la-Neuve 2023. *Fens, Forests and Formulas*, Oisterwijk 2023. *Joint Statistical Meeting*, Toronto 2023. *Extreme Value Analysis*, Milan 2023. *Workshop on Challenges for statistics in the era of data science*, Hannover 2023. *Closing Workshop "Asymptotic Theory for Multidimensional Statistics"*, Leuven 2023. *Extremes and Time Series: A Workshop on the Occasion of Richard Davis' 70th Birthday*, New York City 2023. *Measure-Theoretic Approaches and Optimal Transportation in Statistics*, Paris 2022. *Adaptive and High-Dimensional Spatio-Temporal Methods for Forecasting*, Luminy 2022. *Applied Optimal Transport*, Chicago 2022. *Regular Variation and Related Themes*, Dubrovnik 2021. *Workshop and Habilitation "Extremes,*

Statistics and Statistical Learning", Palaiseau 2021. *Joint Statistical Meetings*, Virtual Conference 2021. *Bernoulli-IMS 10h World Congress*, Virtual Conference 2021. *Open World Extremes Seminar*, <https://sites.google.com/view/ow-extremes/home> 2020. *Workshop "Heavy Tails"*, Eindhoven 2019. *International Seminar on Heavy-Tailed Modelling and Its Applications*, Shanghai 2019. *International Conference on Probability Theory and Statistics*, Tbilisi 2019. *62nd ISI World Statistics Congress*, Kuala Lumpur 2019. *Extreme Value Analysis*, Zagreb 2019. *20th Anniversary EURANDOM*, Eindhoven 2018. *26th Meeting of the Royal Statistical Society of Belgium*, Ovifat 2018. *Mass Transportation Theory: Opening perspectives in Statistics, Probability and Computer Science*, Valladolid 2018. *10th Extreme Value Analysis Conference*, Delft 2017 (closing lecture). *Computational and Methodological Statistics (CMStatistics 2016)*, Sevilla 2016. *Conference on Conditional Independence Structures and Extremes*, Munich 2016. *Multivariate and Spatial Extremes with Environmental Applications*, Lancaster 2016. *Third Conference of the International Society for NonParametric Statistics*, Avignon 2016. *Recent Developments in Dependence Modelling with Applications in Finance and Insurance - Third Edition*, Brussels 2016. *Risk, Extremes and Contagion*, Paris 2016. *Workshop on Extreme Value and Time Series Analysis*, Karlsruhe 2016. *Rencontre CIRM: Extremes, copulas, actuarial science*, Luminy 2016 (keynote speaker). *Computational Space-Time Statistics*, KAUST, Jeddah 2015. *The Mathematics and Statistics of Quantitative Risk Management*, Oberwolfach 2015. *European Meeting of Statisticians*, Amsterdam 2015. *International Conference on Dependence and Copulas*, Tokyo 2015. *9th International Conference on Extreme Value Analysis*, Ann Arbor 2015. *Copulae: On the Crossroads of Mathematics and Economics*, Oberwolfach 2015. *Rencontre CIRM: Théorie des valeurs extrêmes et lois des événements rares*, Luminy 2014. *Workshop on high dimensional and multivariate extremes*, Bristol 2014. *ERCIM 2013*, London 2013. *Copulas and Dependence Measures*, New York 2013 (keynote speaker). *Statistische Woche*, Berlin 2013. *18th European Young Statisticians Meeting*, Osijek 2013 (keynote speaker). *8th Conference on Extreme Value Analysis*, Shanghai 2013. *45èmes Journées de statistique de la SFdS*, Toulouse 2013. *Heavy Tails, Extremes and Long-Range Dependence*, Calcutta 2013 (keynote speaker). *Extremes and Risk Management*, Cergy-Pontoise 2012. *Mini-Symposium on Extreme Value Methods*, Leuven 2012. *The Mathematics and Statistics of Quantitative Risk Management*, Oberwolfach 2012. *IAP Workshop 5*, Louvain-la-Neuve 2011. *New developments in Econometrics and Time Series*, Brussels 2011. *7th Conference on Extreme Value Analysis, Probabilistic and Statistical Models and their Applications*, Lyon 2011. *Workshop on Copula Models and Dependence*, Montréal 2011 (keynote lecture). *Econometric and statistical modelling of multivariate time series*, Louvain-la-Neuve 2011. *Dependence in Probability and Statistics*, Luminy 2011. *IAP Workshop 4*, Leuven 2010. *2e Colloque francophone international sur l'Enseignement de la Statistique*, Brussels 2010. *International Symposium on Business and Industrial Statistics*, Portoroz 2010. *Conference on Latest Developments in Heavy-Tailed Distributions*, Brussels 2010. *2nd Belgian Mathematical Society - London Mathematical Society conference*, Leuven 2009. *High-Dimensional Extremes and Applications*, Lausanne 2009 (closing lecture). *27th European Meeting of Statisticians*, Toulouse 2009. *6th International Conference on Extreme Value Analysis*, Fort Collins 2009. *Modelling Multivariate Dependence and Extremes in Finance*, Oxford 2008. *International Workshop on Applied Probability*, Compiègne 2008. *2nd Brussels-Waseda Seminar on Time Series and Financial Statistics*, Brussels 2008. *ISI 2007 - 56th Session of the International Statistical Institute*, Lisbon 2007. *Brussels-Prague Seminar*, Brussels 2005. *Extremes, Risk and Resampling Techniques*, Tomar 2003. *Kolmogorov Conference*, Tbilisi 2003.

At university departments and research institutes

KU Leuven, Leuven 2025-04-25. University of Copenhagen, Copenhagen 2025-01-28. KU Leuven, Leuven 2024-09-26. Université du Luxembourg, Luxembourg 2024-05-30. Department of Decision Sciences (Statistics Seminar), Milano 2024-01-18. IRMP (Mathematics Colloquium), Louvain-la-Neuve. Institut de Mathématiques de Toulouse, Toulouse 2023-04-

18. Eurandom, Eindhoven 2023-02-28. ENSAI, Rennes 2023-01-31. Universität Graz, Graz 2022-12-13. Département de Mathématiques + naXys, Namur 2022-12-01. Tilburg University, Tilburg 2022-10-04. University of Geneva, Geneva 2021. Université de Sherbrooke, Sherbrooke (virtual) 2021-03-03. Tilburg University, Tilburg 2020-03-11. University of Edinburgh, Edinburgh 2019-09-27. Columbia University, New York City 2018-04-05. Université libre de Bruxelles, Brussels 2017-11-24. Universiteit Gent, Gent 2017-11-10. Télécom ParisTech, Paris 2017-09-14. Hitotsubashi University, Tokyo 2015-06-22. KU Leuven, Leuven 2015-05-07. ESSEC Business School, Paris 2014-05-19. Université Pierre et Marie CURIE, Paris 2014-05-19. University of Copenhagen, Copenhagen 2014-04-22. Leiden University, Leiden 2014-04-11. Université de Cergy-Pontoise, Cergy-Pontoise 2014-01-15. Georgia Augusta University Göttingen, Goettingen 2014-01-08. UCLouvain, Louvain-la-Neuve 2013-10-25. Université Paris Ouest Nanterre La Défense, Nanterre 2013-11-14. Technical University Delft, Delft 2013-10-23. Università Commerciale Luigi Bocconi, Milano 2013-03-20. Princeton University, Princeton 2012-11-16. Columbia University, New York 2012-11-12. Universität Hamburg, Hamburg 2012-06-12. Chalmers University of Technology, Gothenburg 2011-11-03. Universiteit Hasselt, Hasselt 2011-05-06. Télécom ParisTech, Paris 2011-01-19. Universität zu Köln, Cologne 2010-12-15. Technische Universität Dortmund, Dortmund 2010-11-16. UCLouvain, Louvain-la-Neuve 2010-10-29. Université de Lille I, Lille 2010-10-26. Zagreb University, Zagreb 2010-10-11. Université Paris I, Paris 2010-06-18. Nordic Computing Centre, Oslo 2010-01-26. Universiteit Antwerpen, Antwerp 2009-06-05. ETH Zürich, Zürich 2008-11-21. Chalmers University of Technology, Göteborg 2007-06-07. Université libre de Bruxelles, Brussels 2005-12-09. Chalmers University of Technology, Göteborg 2005-08-15. Justus Liebig University Giessen, Giessen 2004-10-22. Ghent University, Ghent 2003-10-24. KU Leuven, Leuven 2003-05-19. Delft University of Technology, Delft 2003-03-12. Eindhoven University of Technology, Eindhoven 2002-09-26. Lancaster University, Lancaster 2002-04-22. University of the Free State, Bloemfontein 2002-03-22. University of Copenhagen, Copenhagen 2001-11-21. Chalmers University of Technology, Göteborg 2001-02-23.

Personal info

Nationality: Belgian.

Birth place and date: Leuven, 1974-11-22.

Married with Nadia. Father of Ruben (2004), Ward (2006) and Martijn (2009).

Mother tongue: Dutch. Fluent in French and English.

Interests: music, board games, running.