

# Johan SEGERS - Curriculum Vitae

## Affiliations

*Professeur*, Université catholique de Louvain, Institut de Statistique, Biostatistique et Sciences Actuarielles.

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*Extramural Research Fellow*, Tilburg University, CentER for Economic Research.

## Prize

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.

## Administration

*President*, Louvain School of Statistics, Biostatistics and Actuarial Sciences, Université catholique de Louvain, 2015-2018.

## Career

*Professeur*, Université catholique de Louvain, Institut de Statistique, Biostatistique et Sciences Actuarielles, from 2011-10-01.

*Chargé de cours à titre définitif*, Université catholique de Louvain, Institut de Statistique, from 2009-09-01 to 2011-09-30.

*Chargé de cours à titre temporaire*, Université catholique de Louvain, Institut de Statistique, from 2006-09-01 to 2009-08-31.

*Assistant professor*, Tilburg University, Department of Econometrics and OR, from 2003-01-01 to 2006-08-03.

*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*, Katholieke Universiteit Leuven, Department of Mathematics, from 1997-09-01 to 2001-08-31.

## Education

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

Licentiaat in Mathematics, Katholieke Universiteit 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 52 articles in international scientific journals with peer review. Please see the publication list exported from DIAL (Dépôt Institutionnel de

l'Académie `Louvain').

## Editorial boards

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

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

*Bernoulli* (2010–...)

*Journal of Applied Probability* (2010–...)

*Advances in Applied Probability* (2010–...)

*Extremes* (2012–...)

*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, "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*

*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 Warchoł*, 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

ANNA KIRILIOUK, "Non-linear tail dependence models", Université catholique de Louvain (in progress).

MICHAŁ WARCHOŁ, "Time-series models for multivariate extremes", Université catholique de Louvain (in progress).

NATHAN UYTENDAELE, "Inference for hierarchical and graphical copula structures", Université catholique de Louvain (in progress).

GORDON GUDENDORF, "Nonparametric estimation of multivariate extreme-value copulas", Université catholique de Louvain 2012-09-04.

THOMAS MEINGUET, "Extreme-value theory for stationary stochastic processes", Université catholique de Louvain 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", Katholieke Universiteit 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*

SALIM BOUZEZBDA, "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.

### *PhD Committees (apart from my own PhD students)*

GILDAS MAZO, "Construction et estimation de copules en grande dimension", Université de Grenoble 2014-11-17, promotor: STÉPHANE GIRARD AND FLORENCE FORBES.

ALEKSANDAR SUJICA, "Estimation in nonparametric regression under copula dependent censoring", Université catholique de Louvain 2014-10-21, promotor: INGRID VAN KEILEGOM.

AZRA TAFRO, "Extremal Properties for Weakly Dependent Sequences and Arrays", University of Zagreb 2014, promotor: BOJAN BASRAK.

ANNE SABOURIN, "Mélanges Bayésiens de Modèles d'Extrêmes Multivariés. Application à la Prédétermination Régionale des Crues avec Données Incomplètes", Université Lyon 1 2013-09-24, promotor: ANNE-LAURE FOUGÈRES AND PHILIPPE NAVEAU.

EMILIE CHAUTRU, "Multivariate Statistics for Dietary Risk Analysis", Télécom ParisTech 2013-09-06, promotor: STÉPHAN CLÉMENÇON AND JEAN-LUC VOLATIER.

ELENA DI BERNARDINO, "Modélisation de la dépendance et mesures de risque multidimensionnelles", Université Lyon 1 2011-12-08, promotor: VÉRONIQUE MAUME-DESCHAMPS.

STEPHEN GRØNNEBERG, "Some applications of stochastic process techniques to statistics", University of Oslo 2011-11-18, promotor: NILS LID HJORT.

DMITRII ZHOLUD, "Extreme Value Analysis of Huge Datasets", Chalmers University of

Technology and Göteborg University 2011-11-03, promotor: HOLGER ROOTZÉN.

JEAN-MARC FREYERMUTH, "Tree-structured wavelets in nonparametric function estimation", Université catholique de Louvain 2011-10-27, promotor: RAINER VON SACHS.

AXEL BÜCHER, "Statistical Inference for Copulas and Extremes", Bochum University 2011-06-21, promotor: HOLGER DETTE.

FREDERIK MICHIELS, "Dependence modeling in economic applications: Toward a more efficient copula approach", Universiteit Antwerpen 2010-12-07, promotor: ANN DE SCHEPPER.

DANIJEL KRIZMANIC, "Functional limit theorems for weakly dependent regularly varying time series", Zagreb University 2010-10-13, promotor: BOJAN BASRAK.

OLGA REZNIKOVA, "Dynamic modelling of the dependence in multivariate time series", Université catholique de Louvain 2010-09-29, promotor: CHRISTIAN HAFNER.

SHUYAN LIU, "Lois stables et processus ponctuels: liens et estimation des paramètres", Université Lille 1 2009-12-10, promotor: YOURI DAVYDOV.

PETER MÜLLER, "Modeling dependencies in large insurance claims", Universität Hamburg 2008-07-11, promotor: HOLGER DREES.

RAMON VAN DEN AKKER, "Integer-valued time series", Tilburg University 2007-11-07, promotor: BAS J. M. WERKER.

BJÖRN VANDEWALLE, "Some robust and semi-parametric methods in extreme value theory", Katholieke Universiteit Leuven 2004-09-24, promotor: JAN BEIRLANT.

#### *International scientific conferences*

*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.

#### *Other*

Ecole doctorale thématique en statistique, biostatistique et sciences actuarielles, from 2009-01-19, president from 2013-09-13.

Commission doctorale de domaine "Sciences et Sciences vétérinaires", from 2009-09-14.

## Refereeing

### *For funding agencies*

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, ESAIM Probability and 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, Journal of Econometrics, Journal of Empirical Finance, Journal of Financial Econometrics, Journal of Multivariate Analysis, Journal of Statistical Planning and Inference, Journal of Time Series Analysis, Kybernetika, Methodology and Computing in Applied Probability, Probability Theory and Related Fields, Quantitative Finance, Statistics, Statistics and Probability Letters, Theory and Decision

## Scientific society memberships

International Statistical Institute (Elected member )

Institute for Mathematical Statistics

Belgian Statistical Society

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

## Invited talks

### *At international scientific conferences*

*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.

*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 évènements 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*

Hitotsubashi University, Tokyo 2015-06-22  
Katholieke Universiteit 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  
Université catholique de Louvain, Louvain-la-Neuve 2013-10-25  
Université Paris Ouest Nanterre La Défense, Nanterre 2013-11-14  
Technical University Delft, Delft 2013-10-23  
Universita Commerciale Liugi 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  
Université catholique de Louvain, 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  
Katholieke Universiteit 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

## 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.