

# CURRICULUM VITAE

<b>Name</b>	SIMAR
<b>First name</b>	Léopold Arnold H. M.
<b>Professional Address</b>	Institut de Statistique Université Catholique de Louvain 20, voie du roman pays B-1348 Louvain-la-Neuve, Belgium
<b>Tel</b>	+32-(0)10 47 43 08
<b>E-mail</b>	leopold.simar@uclouvain.be
<b>Private Address</b>	Avenue des Chênes, 16 B-1435 Mont-Saint-Guibert, Belgium
<b>Tel</b>	+32-(0)10 45 26 67
<b>Date of Birth</b>	Etterbeek, 22 November 1946
<b>Civil Status</b>	Married, 2 children
<b>Citizenship</b>	Belgian

## 1 Current Positions and Main Achievements

- **Emeritus Professor, 2009 - ,** Institut de Statistique, Université Catholique de Louvain (UCL)
- **Professeur Ordinaire (Full-time Professor), 1992-2009,** Institut de Statistique, Université Catholique de Louvain (UCL)
- **Professeur Extraordinaire (Part-time Professor), 1992-2008,** Facultés Universitaires Saint-Louis (FUSL)
- **Professeur Ordinaire (Full-time Professor), 1974-1992,** Facultés Universitaires Saint-Louis (FUSL)
- **Professor, 1991-2016,** Center for Economics and Management, IFP School, Institut Français du Pétrole (IFP), Rueil-Malmaison, Paris, France.
- **Visiting Professor, 2008 - :** GREMAQ and IDEI, Toulouse School of Economics, Université de Toulouse I, France.
- **Visiting Professor, 2012 - :** Department of Computer, Control and Management Engineering “A. Ruberti”, University La Sapienza, Roma, Italy.
- **Associate Member, 1969 - ,** Center for Operations Research and Econometrics (CORE), Université Catholique de Louvain (UCL)
- **Dean 1978-1990,** Faculté des Sciences Economiques Sociales et Politiques, FUSL.

- **Founder President 1992-2004**, Institute of Statistique, UCL
- **President 1999-2002**, Belgian Statistical Society
- **Various Awards**
  - “**Professore di Chiara Fama**”, **2006 and 2007**, Italian Ministry of Research: Scuola Superiore Sant’Anna, Pisa & University of Pisa.
  - “**Chaire d’Excellence Pierre de Fermat**”, **2008 and 2009**, Région Midi-Pyrénées, Toulouse School of Economics, Toulouse.
  - **Honorary Member, 2009** -, Belgian Statistical Society
  - “**Messageri della Conoscenza**”, **2013-2014**, Italian Ministry of Research: Università degli Studi del Salento, Lecce, Italy.
  - **Fellow of the *Journal of Econometrics*, 2015**, for “Extraordinary Publishing Contributions to Econometrics”.
  - **Econometric Theory Award, 2016**, in “Recognition of Research Contributions, *multa scripsit*, to the Science of Econometrics”.

## 2 Education

- June 1964, **Humanités Latin-Mathématiques**, Institut Saint-Stanislas, Etterbeek, Brussels.
- July 1969 : **Ingénieur Civil en Mathématiques Appliquées**, *Grande Distinction*, Université Catholique de Louvain.
- March 1974 : **Docteur en Sciences Appliquées**, Faculté des Sciences Appliquées (groupe des Sciences des Mathématiques Appliquées), *La Plus Grande Distinction*, Université Catholique de Louvain (promotor : Professor J.F. Mertens).

## 3 Professional Experience

### 3.1 Main Positions

- 1969-1974: **Research Associate** at CORE, Université Catholique de Louvain (UCL), grants from *Traction Électricité, Fond de la recherche fondamentale collective, Belgian gouvernement (FRFC)*, *Service de la programmation de la politique scientifique, Belgian gouvernement (SPPS)*.
- 1974-1975: **Teaching Assistant**, Engineering Faculty, UCL.
- 1974-1975: **Chargé de Cours Invité**, Facultés Universitaires Saint-Louis (FUSL), Brussels, Belgium.

- 1975-2000: **Permanent Faculty Member** at CORE, UCL.
- 1975-1979: **Chargé de Cours**, Faculté Sciences Economiques Sociales et Politiques, FUSL.
- 1978-1980: **Chargé de Cours Invité**, Faculté des Sciences Economiques Sociales et Politiques, UCL.
- 1980-1985: **Professeur**, FUSL, Brussels, Belgium.
- 1983-1990: **Chargé de Cours Invité**, Faculté des Sciences Economiques Sociales et Politiques, UCL.
- October 1985- September 1992: **Professeur Ordinaire**, FUSL.
- October 1990- September 1992: **Professeur**, UCL.
- October 1992- October 2009: **Professeur Ordinaire**, UCL.
- October 1992- October 2008: **Professeur Extraordinaire**, FUSL
- October 2001- present: **Associate Faculty Member** at CORE, UCL.

### 3.2 Visiting Professorships

- 1991 – : Ecole Nationale Supérieure du Pétrole et des Moteurs (ENSPM), Institut Français du Pétrole (IFP), Rueil-Malmaison, Paris, France.
- 1991 to 1998: Institut d'Enseignement Scientifique d'Economie et de Gestion (IESEG), Facultés Catholiques de Lille, France.
- 1999 to 2001: Ecole Nationale de la Statistique et de l'Analyse de l'Information, (EN-SAI), Campus de Ker-Lann, Rennes, France.
- 2001, 2005 and 2006: IDEI, Université des Sciences Sociales, Toulouse I, France.
- 2001 to 2009: Ecole Nationale de la Statistique et de l'Administration Economique, (ENSAE), Malakof, Paris.
- 2006 and 2007: Scuola Superiore Santa Anna & University of Pisa, Pisa, Italy.
- 2008 and 2009: Fakultät für Wirtschaftswissenschaften, Universität Karlsruhe (TH), Germany.
- 2008 – : GREMAQ and IDEI, Toulouse School of Economics, Université de Toulouse I Capitole, France.
- 2012 – : Department of Computer, Control and Management Engineering “A. Ruberti”, University La Sapienza, Roma, Italy.

### 3.3 Fields of Teaching

- Probability, Statistics (undergraduate for Economics and Engineering)
- Computer Sciences, Mathematics (undergraduate for Economics)
- Multivariate Statistics (undergraduate for Economics, Psychology)
- Multivariate Data Analysis, Stochastic Models (undergraduate and postgraduate for Statistics, Mathematics, Economics and Engineering),
- Resampling Methods (postgraduate for Mathematics and Statistics)
- Productivity Analysis and Efficiency Measurements (postgraduate for Economics and Engineering)

### 3.4 Various Scientific Responsibilities

- 1978-1990: **Director**, Séminaire de Mathématiques Appliquées aux Sciences Humaines (SMASH), FUSL.
- 1989-1992: **Co-Director**, CORE, UCL.
- 1991-1994: **Co-promotor** (with Prof. M.Mouchart), CORE and Institut de Statistique, UCL, Programme d’Impulsion *Transport et Mobilité*, SPPS, Research Grant from the Belgian Government.
- 1992-1994: **Co-promotor** (with Prof. W. Härdle), Institut de Statistique, UCL, Research project FDS on *Computer Aided Teaching in Statistics*.
- 1993-1998: **Co-promotor** (with Prof. M.Mouchart), Institut de Statistique, UCL, *Semi- and Non-parametric Methods: Computational Problems and Applications*, Projets d’Actions de Recherche Concertées (PARC), Belgian Government.
- 1995-1997: **Promotor UCL**, European Network (EC), “Human Capital and Mobility”, *Nonparametric and semiparametric statistical methods*. Coordination, Prof. M. Hallin, ULB, Brussels.
- 1998-2003: **Promotor**, Institut de Statistique, UCL, *Semi- and non-parametric methods as tools for analyzing complex data structures*, Projets d’Actions de Recherche Concertées (PARC), Belgian Government.
- 1998-2002: **Promotor**, Institut de Statistique, UCL, European Commission, INCO-Copernicus network with Academia de Studii Economice, Romania, State University of Moldova, Moldavia and Université des Sciences Sociales de Toulouse, France, *STEFAN CEL MARE Sectorial Technical Efficiency and Financial Analysis a Comparative Evaluation Look for Moldavian and Romanian Economics*. Coordination with Ph. Vanden Eeckaut, STAT, UCL.

- 2002-2006, **Main Promotor**, IAP-Phase V, (Interuniversity Attraction Pole), Coordination (with Prof. I. Gijbels 2002-2004, with Prof. I. Van Keilegom 2004-2006) of a Research Network on *Statistical techniques and modeling for complex substantive questions with complex data*, Belgian Science Policy.
- 2002, **Chair**, Organizing Committee of the “XXXIV Journées de Statistique”, Annual Meeting of the SFDS (Statistical Society of France) held in Belgium, May 2002.
- 2003-2005, **Chair**, Bernoulli Section Program Committee and Member of the Coordination Program Committee of the 55th Session of the International Statistical Institute (ISI), World Congress held in Sydney, April 2005.
- 2004-2009, **Research Grant and Member** of the European Network of Excellence PRIME (Policies for Research and Innovation in the Move toward the European Research Area), Associate partner of the Scuola Superiore Santa Anna, Pisa, Italy, project AQUAMETH: *Advanced Quantitative Methods to Evaluate the Performance of Public Sector of Research*.
- 2007-2011, **Main Promotor**, IAP-Phase VI, (Interuniversity Attraction Pole), Coordination (with Prof. I. Van Keilegom) of a Research Network on *Statistical Analysis of Association and Dependence in Complex Data*, Belgian Science Policy.
- 2008 and 2009: **Research Grant**, The Helga & Wolfgang Gaul Stiftung, Fakultät für Wirtschaftswissenschaften, Universität Karlsruhe (TH), Germany.
- 2009-2010, **Quality Manager** for the EUMIDA project: *Feasibility Study for Creating a European University Data Collection*, European Commission, Associated with the Facoltà di Ingegneria, University of Pisa, Pisa, Italy.
- 2009-2011, **Research Grant and Member** of the Research Team, *Efficiency and Productivity of an Industry*, GREMAQ, Toulouse School of Economics, Agence Nationale de la Recherche (ANR), France.

### 3.5 Various Administrative Responsibilities

- 1978-1990: **Dean**, Faculté des Sciences Economiques Sociales et Politiques, FUSL.
- 1980-1990: **President**, Centre de Traitement de l'Information, FUSL.
- 1981-1993: **President**, Centre Socio-Culturel et Sportif des FUSL.
- 1990-1992: **Head of the Unit**, Unité PROB (Statistical analysis and probability), Département de Mathematique, UCL.
- 1992-2004: **Founder-Chairman**, Institut de Statistique, UCL.

### 3.6 Miscellanea

- 1984-1985: **President** of a group of experts, Audit of the Faculty, Faculté des sciences économiques sociales et politiques, UCL.
- April 1990: **Consultant**, World Bank, Audit of the Institute of Human Sciences, Yaoundé, Cameroon.
- 1990-1992: **Consultant**, Audit of Statistics at UCL.
- 1992-2001: **Elected member**, Board of the Belgian Statistical Society: **Secretary** (1992-1995), **Vice-President** (1996-1998), **President** (1999-2001).
- 2002- : **Elected member**, The International Statistical Institute (ISI).
- 2004: **Member of the Jury**, Selection Committee, *Management Science Strategic Innovation Price*, European Association of Operational Research Societies (EURO).
- 2003-2007: **Member of the Jury**, Selection Committee, *Price for the Best Thesis of the SFDS, Prix Marie-Jeanne Laurent-Duhamel*, Société Française de Statistique, Paris.

### 3.7 Referees and Scientific Organization Memberships

- 2003- : Associate Editor, *Journal of Productivity Analysis*.
- 2012-2017 : Associate Editor, *Operations Research*.
- 2015-2017 : Associate Editor, *Computational Statistics and Data Analysis*.
- 2004-2009 : Member of the Editorial Board, *International Journal of Statistics and Systems*.
- Referees for:  
*Annals of Statistics, Journal of Econometrics, Annales d'Economie et de Statistique, European Economic Review, Journal of Statistical Planning and Inference, Journal of Productivity Analysis, European Journal of Operational Research, Bulletin of Economic Research, Annals of Operations Research, Journal of Business and Economic Statistics, The Statistician, Annals of the Institute of Statistics, Journal of Applied Econometrics, Review of Economics and Statistics, Communications in Statistics - Theory and Methods, Management Sciences, Empirical Economics, Journal of Multivariate Analysis, Agricultural Economics, Canadian Journal of Statistics, Econometric Theory, Oxford Bulletin of Economics and Statistics, Applied Stochastic Models in Business and Industry, Journal of Applied Statistics, Statistica Sinica, International Journal of Information Technology and Decision Making, Statistics, Journal of the American Statistical Society, Journal of Applied Economics, Statistical papers, Operations Research, The Manchester School, The Journal of Risk and Insurance, Journal of the*

*Operational Research Society, Economics Letters, Optimization Letters, International Journal of Information Technology & Decision Making, Omega: The International Journal of Management Science.*

- Projects Evaluator:

*FNRS and FWO, Belgium, CNRS, France, NSF, USA, European Commission, Brussels, Athens University of Economics and Business, Greece.*

- Present and Past Member of Scientific Societies:

*Bernoulli Society for Mathematical Statistics and Probability, American Statistical Association, Société Belge de Statistique, Société Française de Statistique, International Statistical Institute, Econometric Society.*

## 4 Thesis

### 4.1 Thesis as Promotor and/or Co-promotor

- Dominique DEPRINS (1989), Estimation de frontières de production et mesures de l'efficacité technique, Department of Economics, UCL.
- Berwin TURLACH (1994), Computer-aided Additive Modeling (co-promotor with W. Härdle ), Institute of Statistics, UCL.
- Sigbert KLINKE (1995), Data structures in computing statistics (co-promotor with W. Härdle), Institute of Statistics, UCL.
- Daniela CLIMOV (2002), Semiparametric Analysis of Single Index Models, Institute of Statistics, UCL.
- Claire BEGUIN (2002), Analysis of Expenses Linked to Hospital Stays: A Frontier Approach, Institute of Statistics, UCL.
- Cinzia DARAIO (2003), Comparative productivity and efficiency analysis based on nonparametric and robust nonparametric methods. Methodology and Applications (co-promotor with C. Bianchi and A. Bonaccorsi), Department of Economics and Management, Scuola Superiore Sant'Anna, Pisa, Italy.
- Isabelle DE MACQ (2004), Hyper-Rectangular Space Partitionning Trees, Institute of Statistics, UCL.
- Claudia CURI (2007), Inferences with Malmquist Indices, Department of Management Engineering, University of Rome, Italy, (co-promotor with P. Mancuso).
- Céline LE BAILLY de TILLEGHEN (2008), Statistical Contribution to the Virtula Multicriteria Optimisation of Combinatorial Molecules Libraries and to the Validation and Application of QSAR Models, (co-promotor with B. Govaerts), Institute of Statistics, UCL.
- Géry GEENENS (2008), Semiparametric Models for Contingency Tables, Institute of Statistics, UCL.

### 4.2 Memberships of PhD Jury Aboard

- 25 April 1991, Phd in Economics, Isabelle Perigne, Université des Sciences Sociales de Toulouse, France.
- October 1991, Phd in Economics, Aké N'Gbo, Université des Sciences Sociales de Toulouse, France.
- 9 April 1999, Thèse d'Habilitation à Diriger des Recherches, Michel Simioni. Université des Sciences sociales, Toulouse,

- 22 December 1999, Phd in Economics, (Université de Bourgogne), Sandrine Juan, Institut Français du Pétrole, Ecole des Pétroles et Moteurs, Rueil-Malmaison.
- 25 August 2000, Phd in Economics, Einar Belsom, Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology, Trondheim, Norway.
- 15 November 2001, Phd in Engineering, Poh-Ling Khoo, Faculty of Applied Science and Engineering, University of Toronto, Canada.
- 3 July 2003, Phd in Economics, (Université de Bourgogne), Jérôme Pompeigne, Institut Français du Pétrole, Ecole des Pétroles et Moteurs, Rueil-Malmaison.
- 5 December 2003, Phd in Mathematics (statistics), Abdelaati Daouia, Université des Sciences sociales, Toulouse I.
- 23 May 2004, Phd in Economics, Nolwenn Roudaut, Université des Sciences sociales, Toulouse I.
- 1 July 2004, Thèse d'Habilitation à Diriger des Recherches, (Université de Bourgogne), Frédéric Lantz, Institut Français du Pétrole, Ecole des Pétroles et Moteurs, Rueil-Malmaison.
- 2 June 2005, PhD in Mathematics, Maguelonne Chandesris, Université Pierre et Marie Curie (Paris VI), Paris.
- 21 June 2007, PhD in Economics, Laurent Cavaignac, Université de Perpignan.
- 12 October 2007, PhD in Statistics, Vincent Lefieux, Université de Rennes 2.
- 28 June 2011, Thèse d'Habilitation à Diriger des Recherches en Mathématiques Appliquées, Anne Vanhems, Université Toulouse 1 Capitole.
- 22 June 2012, PhD in Economics, Anastasia Ri, Université Nice-Sophia Antipolis, France.
- 1 December 2016, PhD in Economics, Nadia Kpondjo, Université Paris Ouest Nanterre, France.
- 7 February 2018, PhD in Economics, Management and Quantitative Methods, Pierluigi Toma, Università del Salento, Lecce, Italy.
- 15 April 2019, Thèse d'Habilitation à Diriger des Recherches, Abdelaati Daouia, Toulouse School of Economics, Université Toulouse 1 Capitole.
- 12 November 2019, PhD in Production Engineering, Thyago C.C. Nepomuceno, Universidade Federal de Pernambuco, Recife, Brazil and Università La Sapienza, Roma, Italy.

## 5 Scientific Activities

### 5.1 Academic Visits

- March-September 1974, Departement of Operations Research, Cornell University, Ithaca, New-York, USA, NATO postdoctoral fellowship.
- 1-3 November 1990, Institute of Statistics and Decision Sciences, Duke University, Durham, N.C., USA.
- 24-26 April 1991, Université des Sciences Sociales de Toulouse, France.
- 18-21 October 1991, Université des Sciences Sociales de Toulouse, France.
- 8-13 June 1993, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 15-20 February 1994, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 28 February-5 March 1995, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 1-3 November 1995, Department of Economics, University of Texas, Austin, Texas, USA.
- 22 January-4 February 1996, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 5-6 November 1996, Department of Economics, University of Texas, Austin, Texas, USA.
- 7-8 November 1996, Department of Economics, Rice University, Houston, USA.
- 12-26 January 1997, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 28-31 October 1997, Department of Economics, University of Texas, Austin, Texas, USA.
- 18-25 January 1998, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 1-4 November 1998, Department of Statistics, Rice University, Houston, Texas, USA.
- 4-8 November 1998, Department of Economics, University of Texas, Austin, Texas, USA.
- 12-15 February 1999, Academia de Studii Economice, Bucarest, Roumanie.
- 15-19 May 1999, Institute of Public Health, University of Lund, Sweden.

- 10-12 June 1999, ENSAI (Ecole Nationale de la Statistique et de l'Analyse de l'Information), Campus de Ker-Lann, Rennes, France.
- 14 November-14 December 1999, Center for Mathematics and its Applications, School of Mathematics, Australian National University, Canberra, Australie.
- 13 February-12 March 2000, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 2 May au 3 June 2000, Institut d'Economie Industrielle (IDEI) de l'Université des Sciences Sociales de Toulouse, France.
- 10–14 June 2000, Department of Economics, University of Texas, Austin, Texas, USA.
- 22 June -1 July 2000, ENSAI (Ecole Nationale de la Statistique et de l'Analyse de l'Information), Campus de Ker-Lann, Rennes, France.
- 22-23 August 2000, Frisch Center for Economic Research and Oslo University, Oslo, Norway.
- 24-25 August 2000, Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology, Trondheim, Norway.
- 21 January-4 February 2001, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin.
- 28 May -10 June 2001 et August 2001, Institut d'Economie Industrielle (IDEI), Université des Sciences Sociales de Toulouse, France.
- 14-18 November 2001, Faculty of Applied Science and Engineering, University of Toronto, Canada.
- 13-18 August, 2002, Institut für Statistik und Ökonometrie, Humboldt-Universität zu Berlin, Germany.
- 7-10 February, 2003, Institut für Statistik und Ökonometrie, Humboldt-Universität zu Berlin, Germany.
- 21-28 February, 2003, Department of Economics, University of Texas, Austin, Texas, USA.
- 18-25 May, 2003, Institut d'Economie Industrielle (IDEI), Université des Sciences Sociales, Toulouse I, France.
- 4-7 December, 2003, Groupe de Recherche en Economie Mathématique (GREMAQ), Université des Sciences Sociales, Toulouse I, France.
- 23-29 May, 2004, Institut d'Economie Industrielle (IDEI), Université des Sciences Sociales, Toulouse I, France.

- 12-16 July, 2004, Department of Economics, Universität of Mainz, Germany.
- 20-22 October 2004, Laboratory of Economics and Management, Santa-Anna School of Advanced Studies, Pisa, Italy.
- 2-5 December 2004, Departamento de Economia Aplicada, Universidad del País Vasco, Bilbao, Spain.
- 10-14 April 2005, Department of Economics, University of Texas, Austin, Texas, USA.
- December 2005 and May 2006, Institut d'Economie Industrielle (IDEI), Université des Sciences Sociales, Toulouse I, France.
- 2-7 April 2006, Departement of Statistical Science, University of Bologna, Italy.
- July and October 2006, Laboratory of Economics and Management, Santa-Anna School of Advanced Studies and University of Pisa, Faculty of Engineering, Pisa, Italy.
- 26 September - 6 October 2006, Institute for Economics and Social Sciences, Bonn Universität, Germany.
- 2-9 November 2006, Institut für Statistik und Ökonometrie, Humboldt-Universität zu Berlin, Germany.
- 17-23 November 2006, Facoltà di Ingegneria, Università di Pisa, Italy,
- 12-15 April 2007, Department of Economics, Union College, Schenectady NY, USA.
- 15-25 April 2007, Departement of Economics, Clemson University, Clemson SC, USA.
- 28 May -2 June 2007, Departement of Statistical Science, University of Bologna, Italy.
- 6-18 May 2007, Institut d'Economie Industrielle (IDEI), Université des Sciences Sociales, Toulouse I, France.
- 7-13 September 2007, Facoltà di Ingegneria, Università di Pisa, Italy,
- 24-29 March 2008, Departement of Statistical Science, University of Bologna, Italy.
- 6 Months in 2008-2009, Institut d'Economie Industrielle (IDEI/GREMAQ), Toulouse School of Economics, France.
- 18-23 June 2008, Departement of Economics, Clemson University, Clemson SC, USA.
- 19-22 October 2008, Facoltà di Ingegneria, Università di Pisa, Italy.
- December 2008 and January and July 2009, Fakultät für Wirtschaftswissenschaften, University of Karlsruhe, Germany.
- 17-19 March 2009, Department of Economics, Michigan State University, Lansing, USA.

- 19-22 March 2009, Department of Economics, Rice University, Houston, USA.
- 1-4 April 2009, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy.
- 13-19 April 2009, Departement of Statistical Science, University of Bologna, Italy.
- 19-25 April 2009, Dipartimento di Scienze Economiche, Università di Verona, Italy.
- 21-27 February 2010, Institut d'Economie Industrielle (IDEI/GREMAQ), Toulouse School of Economics, France.
- 12-18 April 2010, Kiev School of Economics, Kiev, Ukraine.
- May, September and December 2010, Research Grant, INRA-GREMAQ, Toulouse School of Economics, France.
- 6-12 June 2010, Departement of Economics, Clemson University, Clemson SC, USA.
- 23-29 October 2010, Dipartimento di Scienze Aziendale, Centro Studi di Ingegneria Economico-Gestionale (CIEG), Università di Bologna, Italy.
- 21-26 February 2011, Institute for Economics and Social Sciences, Bonn Universität, Germany.
- 27-29 March 2011, Dipartimento di Scienze Aziendale, Centro Studi di Ingegneria Economico-Gestionale (CIEG), Università di Bologna, Italy.
- 29 March- 3 April 2011, Department of Computer and System Sciences, University of Rome La Sapienza, Italy.
- March, May, and September 2011, Visiting Professor, Research Grant, INRA-GREMAQ, Toulouse School of Economics, France.
- 8-12 June 2011, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy.
- 1-18 November 2011, Center for Efficiency and Productivity Analysis (CEPA), School of Economics, The University of Queensland, Brisbane, Australia.
- February–September 2012, Research Grant, INRA-GREMAQ, Toulouse School of Economics, France.
- 6-11 March 2012, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy.
- March–July–November 2012, Department of Computer, Control and Management Engineering “A. Ruberti”, University La Sapienza, Roma, Italy.

- May and September 2012, Visiting Professor, Research Grant, INRA-GREMAQ, Toulouse School of Economics, France.
- 10-16 June 2012, Departement of Economics, Clemson University, Clemson SC, USA.
- 3-8 December 2012, ENSAI, Rennes, France.
- January and April 2013, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy.
- March and October 2013, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- 2–6 April 2013, Academia de Studii Economice, Bucharest, Romania.
- May 2013, Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- 1-16 November 2013, Center for Efficiency and Productivity Analysis (CEPA), School of Economics, The University of Queensland, Brisbane, Australia.
- January to April 2014, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- March, June and November 2014, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- May 2014, September 2014 Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- 27 June–13 July 2014, Center for Efficiency and Productivity Analysis (CEPA), School of Economics, The University of Queensland, Brisbane, Australia.
- 15–21 March 2015, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- May 2015, October 2015 Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- April, November and December 2015, Visiting Professor, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- 1–5 June 2015, Academia de Studii Economice, Bucharest, Romania.
- January, May 2016, September 2016, Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- 8–12 February 2016, Aston Business School, Aston University, Birmingham, England.

- 22–27 February, 15–20, November 2016, Visiting Professor, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- April and October 2016, Visiting Professor, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- 11–18 February 2017, Visiting Professor, Toulouse Business School (TBS), France.
- 21–25 March 2017, Visiting Professor, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- April and November 2017, Visiting Professor, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- May and September 2017, Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- February and November 2018, Visiting Professor, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- March and October 2018, Visiting Professor, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- May and September 2018, Visiting Professor, Research Grant, IDEI, Toulouse School of Economics, France.
- 20–27 January 2019, Visiting Professor, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy.
- April and November 2019, Visiting Professor, Research Grant, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy.
- May and September 2019, Visiting Professor, Research Grant, Toulouse School of Economics, France.
- 2020, Virtual Visits and Research Grants: Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy, and Toulouse School of Economics, France.
- October 2021, Visiting Professor, Research Grant, Toulouse School of Economics, France.
- 20–25 March 2022, Visiting Professor, Toulouse Business School (TBS), France.
- October 2022, April and September 2023, Visiting Professor, Research Grant, Toulouse School of Economics, France.

- October 2023, Visiting Professor, Research Grant: Department of Computer, Control and Management Engineering “A. Ruberti”, Università di Roma, La Sapienza, Italy.
- March and September 2024, Visiting Professor, Research Grant, Toulouse School of Economics, France.

## 5.2 Presentations, Participations and/or Organizations of Congress, Workshops, Seminars,...

In the following list, the names of *International Meetings* are in italics, and **invited** presentations and/or memberships to **Organizing/Scientific Committee** are marked in bold. The “title of the presentations” is between quotes.

1. May 1973 : Econometric Seminar at CORE, Université Catholique de Louvain, “Statistical Inference in the M/GAMMA/1 queueing model”.
2. November 1973 : Institut de Mathématique, Université Catholique de Louvain, “Problèmes d'estimation dans les files d'attentes”.
3. December 1973 : Institut de Mathématique, Université Catholique de Louvain, Belgium, “Estimation de la distribution composante d'un processus de Poisson composé”.
4. December 1973 : Séminaire d'Econométrie, Université de Liège, “Approche Bayesienne en Econométrie”.
5. November 1974 : Mathematical Programming Seminar at CORE : “Estimation of the compounding distribution of a compound Poisson process”.
6. May 1976 : **Invited speaker**, by Professor D.R.Cox at Imperial College, London, “Maximum likelihood estimation of a compound Poisson Process”.
7. February to May 1976 : **Invited** by the Institut de Mathématique, Université Catholique de Louvain, presentation of a short course on “Méthodes non-paramétriques en Statistique”.
8. May 1977 : **Invited speaker**, Département de Démographie, Chaire Quetelet, “Méthodes de classification dans le cadre de l'analyse multivariée”.
9. 14-18 August 1978 : *11th European Meeting of Statisticians*, Oslo, Norway.
10. May 1979 : **Invited speaker** at the contact day FNRS, Statistical Analysis Group, in Louvain-la-Neuve, “Approches bayesiennes en statistique non-paramétrique”.
11. May 1979 : Séminaire Interuniversitaire de 3ème cycle FNRS, Institut de Mathématique, Université Catholique de Louvain, “Utilisation du processus de Dirichlet en analyse bayesienne non-paramétrique”.

12. 28 May-2 June 1979 : **Invited speaker**, *International Meeting on Bayesian Statistics*, Valencia, Spain, “Least-squares approximations in Bayesian analysis” (jointly with M.Mouchart).
13. 2-8 September 1979 : *12th European Meeting of Statisticians*, Varna, Bulgaria : “A survey of bayesian approaches to non-parametric statistics”.
14. February 1980 : Econometric Seminar at CORE, Université Catholique de Louvain, “Least-squares approximations in Bayesian analysis, with applications”.
15. 19-22 May 1980 : *Journées de Statistiques*, Toulouse, France : “Analyse des estimateurs linéaires de Bayes dans quelques cas d’application”.
16. 5 June 1980 : **Organization** of the FNRS-Contact-day, Statistics-group, at the Facultés Universitaires Saint-Louis on the topic: Data Analysis.
17. 30 June 1980 : *First Franco-Belgian Meeting of Statisticians*, Rouen, France, “Approximations au sens des moindres carrés pour les expériences bayesiennes”.
18. 1-4 June 1981 : *Journées de Statistique*, Nancy, France, “Estimation bayesienne et non-paramétrique de distributions mélangeantes”.
19. 15-16 October 1981 : *2nd Franco-Belgian Meeting of Statisticians*, Louvain-la-Neuve and Limal, Belgium, on the topic: Modèles et Méthodes Robustes : Aspects Classiques et Bayesiens. **Member of the Organizing Committee** and presentation of two papers, “Protection contre des erreurs grossières : l’apport des méthodes bayesiennes” and “Approximations des moindres carrés en analyse bayesienne : théorie et applications”.
20. 24-27 May 1982 : *Journées de Statistique*, ULB, Bruxelles, Chairman of a session.
21. 13-18 September 1982 : *15th European Meeting of Statisticians*, Palermo, Sicile, “Some results on the estimation of mixtures”.
22. 25-26 Novembre 1982 : *3rd Franco-Belgian Meeting of Statisticians*, Rouen, France, **member of the Scientific Committee** and presentation of “Bayesian prediction : non-parametric methods and least-squares approximations”.
23. 26 January 1983 : **Invited talk** at the 3ème cycle FNRS on Time Series, Facultés Polytechniques de Mons, “Approches bayesiennes aux problèmes de prédition”.
24. 24-27 May 1983 : *Journées de Statistique*, Lyon, France, “Estimation de mesures d’efficacités techniques”.
25. 5-10 September 1983 : *Second Internationnal Meeting on Bayesian Statistics*, Valencia, Spain, **invited discussant** and presentation of “Bayesian prediction problems”.
26. 24 -25 November 1983 : *4th Franco-Belgian Meeting of Statisticians*, Louvain-la-Neuve and Limal, Belgium, on the topic, Model Choice. **Member of the Organizing Committee**.

27. 15 February 1984 : Econometric Seminar au CORE, “On Farrell Measures of Technical Efficiencies”.
28. 3-7 September 1984 : *16th European Meeting of Statisticians*, Marburg, Germany, “Measuring Technichal Efficiencies”.
29. 22-23 November 1984 : *5th Franco-Belgian Meeting of Statisticians*, Marseille, France, **member of the Scientific Committee**.
30. 20-24 May 1985 : *Journées de Statistique*, Pau, France, “Estimation de modèles linéaires avec résidus gamma”.
31. 23-24 November 1985 : *6th Franco-Belgian Meeting of Statisticians*, ULB, Brussels, **member of the Scientific Committee**.
32. 2 May 1986 : Participation at the Journée d’Etudes sur les Entreprises et Services Publics, Facultés Saint-Louis, Brussels.
33. 26-29 May 1986 : *Journées de Statistique*, Lille, France, “Estimation de Frontières Déterministes avec Facteurs Exogènes d’Inéfficacité”.
34. 7-15 September 1986 : *First World Congress of the Bernouilli Society*, Tashkent,URSS, “Modified Least Squares Estimators for Deterministic Frontier Functions”.
35. 20-21 November 1986 : *7th Franco-Belgian Meeting of Statisticians*, Rouen, France, **member of the Scientific Committee**.
36. 2 February 1987 : **Invited talk**, Séminaire Malinvaud, INSEE, Paris, “Estimation de Frontières et Mesures de Performance Technique”.
37. 18-20 May 1987 : *Journées de Statistique*, Lausanne, Swiss, “Une Famille de Modèles pour Estimer des Performances Techniques”.
38. 8 May 1987 : Participation at the Journées d’Etudes sur la mesure de performance des sociétés de transports urbains, Facultés Saint-Louis,Brussels.
39. 31 May-6 June 1987 : *Third Valencia International Meeting on Bayesian Statistics*, Altea, Espagne, “A Sequential Procedure for the Nonparametric Estimation of Mixtures”.
40. 23-29 August 1987 : *17th European Meeting of Statisticians*, Thessalonique, Grèce, ““A Sequential Procedure for the Nonparametric Estimation of Mixtures”.
41. 19-20 November 1987 : *8th Franco-Belgian Meeting of Statisticians*, Louvain-la-Neuve, Belgium, on the topic, Bayesian Methods: new approaches and perspectives. **Member of the Organizing Committee**.
42. 18 December 1987 : Workshop on the topic: La mesure de performance des sociétés de transports urbains, CIRIEC, Liège. **Member of the Scientific Committee**.

43. 23 March 1988 : Econometric seminar at CORE, “A Class of Models for Estimating Technical Efficiencies : Application to Railways Companies”.
44. 30 May - 2 June 1988: *Journées de Statistique*, Grenoble, France.
45. 23-25 November 1988 : *9th Franco-Belgian Meeting of Statisticians*, Toulouse, France, on the topic: Processus Ponctuels, Processus de Dénombrement et Modèles de Durée. **Member of the Scientific Committee**.
46. 12 May 1989 : Contact day, FNRS-NFWO Contact Statistics Group, ULB, Brussels, on the topic: Nonparametric Forecasting : an Alternative to the Box-Jenkins Methodology ?.
47. 21-26 May 1989: *Journées de Statistique*, Rennes, France.
48. 20-21 October 1989: *1st European Workshop on Efficiency and Productive Measurement in the Service Industries*, Louvain-la-Neuve, Belgium. **Member of the Scientific Committee** and presentation of “Estimating Efficiencies from Frontier Models with Panel Data : a Comparison of Parametric, Non-parametric and Semi-Parametric Methods”.
49. 23-24 November 1989 : *10th Franco-Belgian Meeting of Statisticians*, ULB, Brussels, on the topic: Invariance in Statistics. **Member of the Scientific Committee**.
50. 28 May-1 June 1990 : *Journées de Statistique*, Tours (France), “Estimation de modèles de Frontière avec données de Panel” and “Approximations d’Estimateurs Bayesiens de Mixtures”.
51. 2 July 1990 : Workshop on the topic: Economie théorique et empirique de la production, CORE, presentation of “Estimating Frontier with Panel data”.
52. 13-18 August 1990 : *2nd World Congress of the Bernouilli Society*, Uppsala, Sweden, “Estimating Frontier with Panel data”.
53. 13 September 1990 : **Invited talk** at the CENTER for Economic Research, Tilburg Universiteit, “Bootstrapping in Frontier Models for Measuring Efficiencies”.
54. 29-31 October 1990 : **Invited paper** at the *TIMS/ORSA Joint National Conference*, Philadelphia, P.A., USA, “Estimating Frontier with Panel data : new developments and simulation”.
55. 12-15 November 1990 : **Co-Organization** (with Wolfgang Härdle) of an *International Workshop on Discrete Choice Models*, CORE, Louvain-la-Neuve, Belgium.
56. 21-23 November 1990 : *11th Franco-Belgian Meeting of Statisticians*, CIRM, Luminy, Marseille, on the topic: Statistics and Industry. **Member of the Scientific Committee**.

- 57. 6 December 1990 : Contact day FNRS, Group Statistics, Louvain-la-Neuve, Chairman of a session.
- 58. 15-20 April 1991 : *4th Valencia International Meeting on Bayesian Statistics*, Peñiscola, Spain.
- 59. 24-26 April 1991 : **Invited talk**, Université des Sciences Sociales de Toulouse, France, “Double Bootstrap dans des Modèles de Frontière”.
- 60. 27-30 May 1991 : *Journées de Statistique*, Strasbourg, France, “Bootstrap Itéré et Application aux Modèles de Frontière” and Chairman of a session.
- 61. 16-19 July 1991 : **Invited paper**, *11th European Congress on Operational Research*, Aachen, Germany, “How to Improve the Accuracy of Bootstrap Confidence Intervals in Frontier Models?”.
- 62. 25-26 October 1991 : Membre du Comité Scientifique Organisateur du *2d European Workshop on Efficiency and Productivity Measurement*, CORE, Louvain-la-Neuve, **Member of the Scientific Committee** and presentation of “Iterated Bootstrap in Frontier Models”.
- 63. 21-22 November 1991 : *12th Franco-Belgian Meeting of Statisticians*, CORE, Louvain-la-Neuve, Belgium, on the topic: Computer Intensive Methods in Statistics. **Member of the Scientific Committee**.
- 64. 13 February 1992 : **Invited talk**, Université de Lille III, “La technique du Bootstrap et ses applications dans des modèles de frontières”.
- 65. 18-22 May 1992 : *24èmes Journées de Statistique*, ULB, Brussels, **Member of the Organizing Committee**, Organizing Chairman of two sessions on Bootstrap and on Bayesian Methods.
- 66. 29 June-1 July 1992 : **Invited paper**, *EURO XII / TIMS XXXI Joint International Conference*, Helsinki, Finland, “A Semiparametric Model for Frontier Estimation”.
- 67. 14-18 September 1992 : *20th European Meeting of Statisticians*, Bath, UK, “Efficient semi-parametric estimation in stochastic frontier models”.
- 68. 5-9 October 1992 : *Invited* at CERGE, Charles University, Prague, Tchecoslovaquia, for a serie of lectures on “Parametric Efficiency Analysis, Econometric Approaches”.
- 69. 13 November 1992 : Contact day FNRS, Group Statistics, Institut de Statistique, UCL.
- 70. 18-21 November 1992 : *13th Franco-Belgian Meeting of Statisticians*, Lille, France on the topic: Extreme Value Theory, new results and applications. **Member of the Scientific Committee**.

71. 15 January 1993 : **Invited talk**, Contact day FNRS, Statistics Group, ULB, Brussels, “Frontier Estimation, Parametric and Nonparametric Approaches”.
72. 8 March 1993 : **Invited talk**, *Journées sur les Mesures d'efficacité*, CREPP, Liège and CORE, Louvain-la-Neuve, “Incorporation de facteurs explicatifs pour les mesures d'efficacité paramétriques”.
73. 24-28 May 1993 : *25ème Journées de Statistique*, Vannes, France, “Estimation semi-paramétrique efficace dans un modèle de frontière stochastique”.
74. 8-13 June 1993 : **Invited talk**, Institut für Statistik und Ökonometrie, Humboldt Universität, Berlin, “Recent developments in semi- and non-parametric models for frontier estimation”.
75. 22-26 August 1993 : *European Meeting, Econometric Society*, Uppsala, Sweden.
76. 21-23 October 1993 : *3rd European Workshop on Efficiency and Productivity Measurements*, CORE, Louvain-la-Neuve, **Member of the Scientific Committee** and presentation of “Efficient Estimation of Boundaries”.
77. 17-19 November 1993 : *14th Franco-Belgian Meeting of Statisticians*, Namur, Belgium, on the topic: Problèmes théoriques et fondements statistiques des méthodes de classification, **Member of the Scientific Committee**.
78. 24-27 May 1994 : *26èmes Journées de Statistique*, Neuchâtel, Swiss, Chairman of a session.
79. 5-9 June 1994 : **Invited discussant**, *Fifth Valencia International Meeting on Bayesian Statistics*, Alicante, Spain.
80. 14-15 October 1994 : *2d Annual Meeting of the Belgian Statistical Society*, Spa. Chairman of a session.
81. 20-23 October 1994 : **Invited paper**, *1st Georgia Productivity Workshop*, Athens, Geogia, USA, “Pitfalls of Normal-Gamma Stochastic Frontier Models”.
82. 16-18 November 1994 : *15th Franco-Belgian Meeting of Statisticians*, Grenoble, on the topic: Wavelets in Statistics, **Member of the Scientific Committee**, Chairman of a session.
83. 15-19 May 1995 : *27è Journées de Statistique*, Jouy-en-Josas, France, “Une méthodologie du Bootstrap dans les Modèles de Frontières Nonparamétriques”.
84. 22-24 May 1995 : **Invited paper**, *Advanced Research Workshop on Efficiency Measurements*, Odense University, Danemark, “A General framework for Frontier Estimation with Panel data”.
85. 31 May 1995 : **Invited talk**, Limburgs Universitair Centrum, Diepenbeek, “The bootstrap methodology in frontier models”.

86. 4-7 October 1995 : **Invited paper** at the Conference *Smoothing and Resampling in Economics*, Humboldt Universität, Berlin, “Bootstrapping methods in frontier analysis”.
87. 13-14 October 1995 : **Invited paper**, *3rd Annual Meeting of the Belgian Statistical Society*, Diepenbeek, “A General framework for Frontier Estimation with Panel data”.
88. 27-28 October 1995 : **Invited paper** , *4th European Meeting on Efficiency and Productivity Analysis*, CORE, Louvain-la-Neuve, Belgium, “Statistical Inference in Nonparametric frontiers”.
89. 29 October-1 November 1995 : **Invited Session Chair** and **Invited paper** at the *INFORMS Meeting*, New-Orleans, USA, “Sensitivity of efficiency scores : How to bootstrap in Nonparametric frontier models”.
90. 1-3 November 1995 : **Invited talk**, University of Texas, Austin, Texas, “Nonparametric estimation of Frontier Models”.
91. 23-24 November 1995 : *16th Franco-Belgian Meeting of Statisticians*, ULB, Brussels, on the topic: Nonlinear models for time series. **Member of the Scientific Committee**.
92. 24 January 1996 : **Invited talk**, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, “Estimating and Bootstrapping Malmquist Indices”.
93. 25 March 1996 : **Invited talk**, Université de Paris VI, CREST, “Modèles non paramétriques et méthode du bootstrap pour estimer des indices de Malmquist”.
94. 27-30 May 1996 : *28ème Journées de Statistique*, Université de Laval, Québec, Canada, “Estimation nonparamétrique de frontières stochastiques de production”.
95. 10-11 October 1996 : *4th Annual Meeting of the Belgian Statistical Society*, La Roche, Chairman of a session.
96. 1-3 November 1996 : *2nd Georgia Productivity Workshop*, Athens, Georgia, USA, “Estimating and Bootstrapping Malmquist Indices”.
97. 3-5 November 1996 : **Invited paper**, *Fall 1996 INFORMS meeting*, Atlanta, GA, USA, “A Statistical Model for DEA Estimators”.
98. 21-22 November 1996 : *17th Franco-Belgian Meeting of Statisticians*, Université de Marne-la-Vallée, France on the topic: Duration Models, **Member of the Scientific Committee**. Chairman of a session.
99. 15 January 1997 : **Invited talk**, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, “A Statistical Model for DEA Estimators”.
100. 4 February 1997 : **Invited talk**, Société Royale de Chimie, Bruxelles, “Méthodes statistiques pour l’assurance qualité” (jointly with B. Govaerts).

101. 12 February 1997 : Econometrics and Statistics seminar, CORE and Institute of Statistics, Louvain-la-Neuve, “A statisitcal theory for nonparametric frontier estimators”.
102. 19-21 February 1997 : International Workshop, *The Art of Nonparametric Statistics*, Institute of Statistics, Louvain-la-Neuve, **Member of the Scientific and of the Organizing Committee**.
103. 17 April 1997 : **Invited talk**, Colloquium MAPA, Institut Interfacultaire de Mathématique pure et appliquée, Louvain-la-Neuve, “Le Bootstrap : panacée universelle pour l’inférence statistique?”.
104. 12-15 May 1997 : **Invited lectures**, von Karman Institue for Fluid Dynamics, on “Test methodology for multi-parametric investigations”(jointly with B. Govaerts).
105. 26-30 May 1997 : *29ème Journées de Statistique*, Carcassonne, “Propriétés statistiques des estimateurs non-paramétriques de frontières” and Chairman of a session.
106. 11-12 September 1997 : **Invited speaker**, Societa Italiana di Statistica, Scuola estivale di Statistica Economica, Univerita di Bergamo, Italy. Lectures on “Efficiency Analysis : a Statistical Approach”.
107. 9-11 October 1997 : **Invited speaker**, *5th European Workshop on Efficiency and Productivity Analysis*, Copenhagen, Danemark, “Nonparametric tests of return to scale”. **Member of the Scientific Comittee**.
108. 22-24 October 1997 : **Invited paper**, *Symposium on Nonparametric Functional estimation*, Montreal, Canada, “On estimation of monotone and concave frontier functions”.
109. 26-27 October 1997 : **Invited paper**, *Fall 1997 INFORMS meeting*, Dallas, Texas, USA, “A general methodology for bootstrapping in nonparametric frontier models”.
110. 5 November 1997 : Contact day FNRS, Statistics Group, Louvain-la-Neuve, Belgium, “Frontières de production non-paramétriques: approches statistiques”.
111. 20-21 November 1997 : *18th Franco-Belgian Meeting of Statisticians*, Louvain-la-Neuve, Belgium, on the topic: Statistical Analysis of Mixture Models, **Member of the Scientific and of the Organizing Committee**.
112. 19-22 February 1998 : **Invited by the Wikström Foundation**, Umea School of Business and Economics, Sweden, “Nonparametric Frontier estimation from a Stochastic point of view”.
113. 25-29 May 1998 : *30ème Journées de Statistique*, Société Française de Statistique, Rennes, “ Une méthodologie générale du bootstrap dans des modèles de frontière non-paramétriques” and Chairman of a session.

114. 22-27 June 1998 : **Invited speaker** by the CIDE (Centro Interuniverstario di Econometria), Econometric summer school in Bertinoro, Forli, Italy. Lectures on: “Efficiency Analysis : the Econometric Approach”.
115. 12-18 August 1998 : **Member of the Scientific Committee**, Euro Summer Institute at Warwick, UK, on “20 years of DEA”. **Invited lecture**, “Statistical Inference in DEA Models: the State of the Art”.
116. 5-7 October 1998 : **Invited speaker**, *Journées d'Etudes en Statistique: Méthodes Bayésienne en Statistique*, Société Française de Statistique, CIRM, Marseille, “Le paradigme bayésien” and “Les modèles de base de l'analyse bayésienne”.
117. 8-9 October 1998 : *6th Annual Meeting of the Belgian Statistical Society*, Houffalize, Chairman of a session.
118. 29-31 October 1998 : **Invited Keynote Speaker**, opening lecture, *Georgia Productivity Workshop III*, University of Georgia, Athens, Georgia, USA, “Statistical Inference in Nonparametric Frontier Models: the State of the Art”.
119. 1-4 November 1998 : **Invited talk**, Department of Statistics, Rice University, Houston, Texas, “Non-parametric frontier estimators from a stochastic point of view”.
120. 4-8 November 1998 : **Invited talk**, Department of Economics, University of Texas at Austin, Austin, Texas, “Semiparametric estimation of single index Poisson regression”.
121. 30 November 1998 : **Invited talk**, Université de Paris VI (Jussieu), “Estimateurs non-paramétriques de frontières déterministes: l'approche stochastique”.
122. 13 April 1999 : **Invited speaker**, Information Society Technologies (IST) Programme, organized by Eurostat, Brussels, “Measuring Efficiency in the New Economy”.
123. 1-5 May 1999 : **Invited talk**, Department of Economics, University of Salerno, Italy, “Non-parametric frontier estimators from a stochastic point of view”.
124. 15-19 May 1999 : **Invited talks**, Institute of Public Health, University of Lund, Sweden, “Statistical Inference in Nonparametric Frontier Models” and “Bootstrapping in Econometrics”.
125. 7-8 October 1999 : *7th Annual Meeting of the Belgian Statistical Society*, Ysermonde, Nieuwpoort, Belgium. Chairman of a session.
126. 27-28 October 1999 : **Invited Keynote Speaker**, *Meeting of the EURO working group in DEAPM (Data Envelopment Analysis and Performance Assessment)*, Copenhagen, Denmark, “Introduction to Bootstrap Ideas and Application to Frontier Models”.
127. 29-31 October 1999 : **Invited Discussant, Panelist and Member of the Scientific Committee**, *6th European Workshop on Efficiency and Productivity Analysis*, Copenhagen, Denmark. Chairman of a session and presentation (with Paul Wilson) of “Testing Restrictions in Nonparametric Efficiency Models”.

128. 2 December 1999 : **Invited talk**, Australian National University, Canberra, Australie, “Nonparametric Frontier Models: the Statisticall Approach”.
129. 24–29 April 2000, **Invited talk**, Centre de Recherches en Economie Statistique (CREST), INSEE , Paris, “Estimation de frontières: les approches statistiques”.
130. 19 May 2000, **Invited talk**, Econometrics and Statistics Seminar, GREMAQ and IDEI, Toulouse, “Propriétés statistiques des estimateurs non-paramétriques de frontières”.
131. 21–25 May 2000, **Invited speaker and invited discussant**, *2nd Oviedo Workshop on Efficiency and Productivity*, University of Oviedo, Spain, “Stochastic frontier analysis: the non-parametric approaches”.
132. 15–18 June 2000, **Invited speaker**, *North American Productivity Workshop (NAPW)*, Union College, NY, USA, “Nonparametric stochastic frontier analysis: what can we hope?”.
133. 22-23 August 2000, **Invited talk**, Frisch Center for Economic Research and Oslo University, Oslo, Norway, “Bootstrap Issues in Frontier Estimation”.
134. 24-25 August 2000, **Invited talk**, Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology, Trondheim, Norway, “Nonparamettri Frontier Models: the Statistical Approach”.
135. 10-16 September 2000, **Invited participant**, *Mathematisches Forshungsinstitut Oberwolfach*, on the topic: Controlling Complexity for Strong Stochastic Dependencies.
136. 4-6 October 2000, *8th Annual Meeting of the Belgian Statistical Society*, Herbeumont s/Semois, Belgium, **Member of the Scientific Committee**.
137. 3 November 2000, Statistics Seminar, Institut de Statistique, Louvain-la-Neuve, “Nonparametric Stochastic Frontiers: New Perspectives”.
138. 26-27 April 2001, **Invited talk**, CREST-ENSAI, Rennes, France, “Estimation non-paramétrique d'un modèle de frontière stochastique”.
139. 4-6 May 2001, **Invited participant**, *Applied Mathematics in Europe*, European Mathematical Society, Berlingen, Switzerland.
140. 13-17 May 2001, *33èmes Journées de Statistique de la SFDS*, Nantes, France, “Modèles de Frontières Stochastiques : une approche nonparamétrique”.
141. 1er June 2001, **Invited talk**, Econometrics and Statistics Seminar, GREMAQ and IDEI, Toulouse, France, “Nonparametric Stochastic Frontiers: New Perspectives”.
142. 9-11 juillet 2001, **Invited speaker**, *18th EURO Conference on Opertions Research*, Rotterdam, “Nonparametric frontier estimation: a robust approach”.

- 143. 21-23 September 2001, **Invited speaker**, *Exclusive Workshop on DEA*, SDU-Odense, Danemark, “Nonparametric frontier estimation: a robust approach”.
- 144. 25-29 September 2001, **Member of the Scientific Committee**, *7th European Workshop on Efficiency and Productivity Analysis*, Oviedo, Spain. Presentation of: “Nonparametric frontier estimation: a robust approach” and of “How to Improve the Performances of DEA/FDH Estimators in the Presence of Noise”.
- 145. 12-13 October 2001, *9th Annual Meeting of The Belgian Statistical Society*, Oostende, Belgium, Chairman of a session.
- 146. 17 December 2001, **Invited expert** at a preparatory meeting of the European Scientific Committee for Official Statistics (ESCOS), EUROSTAT, Luxemburg
- 147. 11-13 April 2002, **Invited talk**, CREST-ENSAI, Rennes, France, “Détection d’Outliers dans des Modèles de Frontières Non-paramétriques”.
- 148. 13-17 May 2002, **President of the Organizing Committee**, *34èmes Journées de Statistique*, Société Française de Statistique, Bruxelles-Louvain-la-Neuve, Belgium.
- 149. 21-23 May 2002, International Workshop for the 10th anniversary of the Institute of Statistics, Louvain-la-Neuve, Belgium, *Statistical Modeling and Inference for Complex Data structures*.
- 150. 19 June 2002, **Invited Keynote Address**, *Data Envelopment Analysis and Productivity Measurement*, Union College, NY, USA, “Statistical Inference in Nonparametric Frontier Models: Recent Developments”.
- 151. 20-23 June 2002, *North American Productivity Workshop II*, Union College, Schenectady, NY, USA, “Parametric Approximations of Nonparametric Frontiers”. **Member of the Scientific Committee**
- 152. 28-29 June 2002, **Invited Keynote Speaker**, *Central and Eastern Europ Workshop on Efficiency and Productivity Analysis*, Academia de Studii Economice, Bucharest, Romania, “Statistical Inference in Nonparametric Frontier Models: Recent Developments”.
- 153. 8 July 2002, **Invited talk**, Department of Economics, Universität of Mainz, Germany, “Nonparametric Frontier Models: an overview”.
- 154. 3-9 August 2002, **Invited speaker**, *4th International Conference on Statistical Data Analysis based on the L1-norm and related methods*, Neuchâtel, Swiss, “Detection of Outliers in Frontiers Models”.
- 155. 11 October 2002, Applied Statistics Workshop, Institut de Statistique, UCL, “Factor Analysis and DEA Frontier Estimation: how to reduce dimensions in productivity analysis ”.

156. 18-19 October 2002, *10th Annual Meeting of The Belgian Statistical Society*, Kerkrade, Holland, Chairman of a session. **Member of the Scientific Committee**
157. 22-23 February 2003, **Invited Keynote Speaker**, *8th Annual Texas Econometric Camp*, Fredericksburg, Texas, “Parametric Approximations of Nonparametric Frontiers”.
158. 19-24 July 2003 : **Invited Lectures** by the Institute of Economics and Business Administration, Technical University of Lisbon, Department of Economics, Lisbon, Portugal. Summer School 2003: “Frontier Models”.
159. 13-20 August 2003, *54th ISI Session*, Berlin, Germany. Presentation of “Parametric Approximations of Nonparametric Frontiers”.
160. 6-10 September 2003, **Invited talk**, Laboratory of Economics and Management, Santa-Anna School of Advanced Studies, Pisa, Italy: “Nonparametric Frontier Models: recent developments”.
161. 25-27 September 2003, **Member of the Scientific Committee**, *7th European Workshop on Efficiency and Productivity Analysis*, Oviedo, Spain. Presentation of “Estimation and inference in two-stage, semi-parametric models of production processes”.
162. 9-10 October 2003, *11th Annual Meeting of The Belgian Statistical Society*, La Roche en Ardennes, Belgium, Chairman of a session.
163. 18-20 October 2003, **Invited speaker**, *The Art of Semiparametrics*, Humboldt Universität zu Berlin, Berlin, “How to Improve the Performances of DEA/FDH Estimators in the Presence of Noise”.
164. 27 October 2003, **Invited talk**, Department of economics, University of Lugano, Swiss: “Nonparametric Frontier Models: recent developments”.
165. 22-25 June 2004, **Invited discussant and member of the Scientific Committee**, *North American Productivity Workshop III*, Faculty of Applied Science and Engineering, University of Toronto. Presentation of “Nonparametric Efficiency Analysis: a multivariate conditional quantile approach”.
166. 13 July 2004, **Invited talk**, Department of Economics, University of Mannheim, Germany: “Nonparametric Efficiency Analysis: a multivariate conditional quantile approach”.
167. 4-6 September 2004, **Invited Keynote Speaker, Discussant and Panelist**, *4th International Symposium of DEA*, Aston University, Birmingham, UK, “Estimation and inference in two-stage, semi-parametric models of production processes”.
168. 8-9 October 2004, *12th Annual Meeting of The Belgian Statistical Society*, Vielsam, Belgium, Chairman of a session.

169. 22-24 October 2004, Lugano, Swiss: Working group on “Analysis of Productivity of European Universities”, AQUAMETHPSR project under the PRIME Network of Excellence supported by the European Commission, 6th Framework Programme.
170. 5 November 2004, Statistics Seminar, Institut de Statistique, UCL, “Nonparametric Efficiency Analysis: a multivariate conditional quantile approach”
171. 3 December 2004, **Invited talk**, Departamento de Economia Aplicada, Universidad del País Vasco, Bilbao, Spain: “Robust Nonparametric Estimation of Frontiers”
172. 11 February 2005, **Invited talk**, Institut de Statistique et de Recherche Opérationnelle, ULB, Bruxelles: “Nonparametric Efficiency Analysis: a multivariate conditional quantile approach”.
173. 11-13 March 2005, Centro de Investigação de Políticas do Ensino Superior (CIPES), Porto, Portugal: Working group on “Analysis of Productivity of European Universities”, AQUAMETHPSR project under the PRIME Network of Excellence supported by the European Commission, 6th Framework Programme.
174. 5-12 April 2005, **Chair of the Bernoulli Section Program Committee, Member of the Coordinating Program Committee and Invited paper**, *55th Session of the International Statistical Institute (ISI)*, Sydney, Australia: “Nonparametric Stochastic Frontiers: A Local Maximum Likelihood Approach”.
175. 14-17 April 2005, **Invited talk** at the *Workshop on Efficiency and Productivity Analysis*, University of Georgia, Athens, Georgia, US: “Nonparametric Frontier Models: recent developments and perspectives”.
176. 12-13 May 2005, **Invited speaker** at the *Franqui Foundation Workshop*, ULB, Brussels, presentation of “Nonparametric Stochastic Frontiers: A Local Maximum Likelihood Approach”, and Chairman of a session.
177. 17-20 May 2005, **Member of the Scientific Committee**, *Applied Stochastic Models and Data Analysis-ASMDA2005*, Brest, France. Presentation of “Robust Nonparametric Frontier estimation, using Quantile Frontiers” and Chairman of a session.
178. 27 May 2005, **Invited talk**, Ecole Polytechnique Fédérale de Lausanne, Swiss: “Robust Nonparametric Estimation of Frontiers”
179. 14-15 June 2005, Laboratory of Economics and Management, Santa-Anna School of Advanced Studies, Pisa, Italy: Working group on “Analysis of Productivity of European Universities”, AQUAMETHPSR project under the PRIME Network of Excellence supported by the European Commission, 6th Framework Programme.
180. 29 June-2 July 2005, **Member of the Scientific Committee**, *9th European Workshop on Efficiency and Productivity Analysis*, Brussels, Belgium. Presentation of “LFDH: a continuous nonparametric envelopment estimator for nonconvex technologies”.

181. 3-5 July 2005, **Invited Keynote Speaker**, *Myths and Reality of Productivity Miracles and Failures in Transitional Economies*, EERC-Kiev, Ukraine. “Advances in Statistical Measurement in Efficiency Analysis”.
182. 14-15 October 2005, *13th Annual Meeting of The Belgian Statistical Society*, Corsendonck, Belgium.
183. 1-4 December 2005, IKU-Innovation Research Center, Budapest, Hungary, *Observatory of the European University Panel Session* and *AQUAMETH meeting*, PRIME Network of Excellence, 6th EC Framework Programme: presentation of “Efficiency and Productivity in European Universities”.
184. 2-7 April 2006, Departement of Statistical Science, University of Bologna, Italy, Lectures on “Efficiency Analysis: the econometric approach”.
185. 11-14 June 2006, Institute for Innovation and Knowledge Management, Universitat Polytechnica de Valencia, Spain, *AQUAMETH meeting*, PRIME Network of Excellence, 6th EC Framework Programme, “Efficiency and Productivity in European Universities”.
186. 26 June - 2 July 2006, **Member of the Scientific Committee and Invited Discussant**, *North American Productivity Workshop IV*, Stern School of Business, New York University. Presentation of “Improving the Performances of Parametric Estimators of Frontiers: From Nonparameteric to Parametric Models”.
187. 10-14 July 2006 : **Invited Lectures**, Facoltà di Ingegneria, Università di Pisa, Italy, Summer School on “Advanced Quantitative Methods for Productivity and Efficiency Analysis”.
188. 24-28 August 2006, **Member of the Scientific Committee**, *European Economic Association and Econometric Society 2006 Parallel Meetings*, Vienna, Austria.
189. 5-6 September 2006, **Invited Speaker**, *Fourth Workshop on Indicators in the Knowledge Economy*, KUL, Center of Economic Studies, Leuven, Belgium. Presentation of “Robust Alternatives to Estimate Benchmark Frontiers”.
190. 11-13 October 2006, *14th Annual Meeting of The Belgian Statistical Society*, Houffalize, Belgium.
191. 13-17 November 2006, Università della Svizzera italiana, Lugano, *AQUAMETH meeting* on “Efficiency and Productivity in European Universities” and *PRIME Conference* on “Indicators on Science, Technology and Innovation. History and new Perspectives”.
192. 17-23 November 2006 : **Invited Lectures**, Facoltà di Ingegneria, Università di Pisa, Italy, Lectures on “An Invitation to the Bootstrap: Panacea for Statistical Inference?” and “Recent Advances in Multivariate Data Analysis”.

- 193. 28 January- 2 February 2007, Università di Pisa, Italy, *PRIME Annual Conference*, PRIME is an European Network of Excellence on “Policies for Research and Innovation in the Move towards the European research area”.
- 194. 18-24 March 2007, **Invited participant**, *Mathematisches Forshungsinstitut Oberwolfach*, on the topic: “Semiparametric and Nonparametric Methods in Econometrics”.
- 195. 14 April 2007, **Invited talk**, Workshop at the Department of Business and Economics, Union College, Schenectady, New-York, USA, “Recent Advances in Nonparametric Estimation of Efficient Production Frontiers”
- 196. 11 May 2007, **Invited talk**, Statistics Seminar, GREMAQ, Toulouse I, France, “Stochastic Versions of FDH/DEA Envelopment Estimators”.
- 197. 28 May - 2 June 2007, Departement of Statistical Science, University of Bologna, Italy, Lectures on “Introduction to the Bootstrap with Applications in Econometrics”.
- 198. 2-4 June 2007, **Invited Speaker**, at the Workshop *Productivity and Efficiency of European Banks*, Dipartimento di Scienze Economiche, Università di Verona, Italy. Opening talk: “Robust Alternatives to Estimate Benchmark Frontiers”.
- 199. 11 June - 15 June 2007, **Member of the Scientific Committee**, *39èmes Journées de Statistique*, Société Française de Statistique, Angers, France.
- 200. 26-29 June 2007, **Member of the Scientific Committee and Invited Discussant**, *10th European Workshop on Efficiency and Productivity Analysis*, Lille, France.
- 201. 20-21 August 2007, **Member of the Scientific Committee**, *Advances in Semiparametric Methods and Applications*, Satellite meeting of ISI 2007, Cemapre, Lisbon, Portugal. Organisation of an invited papers session on “Frontier and Boundary Estimation”.
- 202. 24-25 September 2007, University of Sussex, United Kingdom, *AQUAMETH meeting*, PRIME Network of Excellence, 6th EC Framework Programme, “Efficiency and Productivity in European Universities”.
- 203. 12 October 2007, **Invited talk**, CREST-ENSAI, Rennes, France, “Nonparametric Stochastic Frontier Models”.
- 204. 18-20 October 2007, **Keynote Speaker**, *15th Annual Meeting of The Belgian Statistical Society*, University of Antwerp, Belgium, “Stochastic Versions of FDH/DEA Envelopment Estimators”.
- 205. 11-14 November 2007, **Invited Discussant**, *Italian Research in Innovation Systems (IRIS) Workshop*, Politecnico di Torino, Italy. Presentation with A. Bonacorsi and C. Daraio of “Economies of scale in teaching and research: an European comparison at discipline level”.

- 206. 23-27 January 2008, *AQUAMETH Workshop*, “Aquameth Project: challenges and future developments”, University of Pisa, Italy.
- 207. 24-29 April 2008, Departement of Statistical Science, University of Bologna, Italy, Lectures on “Efficiency Analysis: the econometric approach”.
- 208. 24-28 June 2008, **Member of the Scientific Committee and Invited Panelist**, *North American Productivity Workshop V*, Stern School of Business, New York University. Presentation of “Frontier estimation and extreme values theory” and Panel discussion on “The Future of Efficiency Analysis in the Real World”.
- 209. 6-12 July 2008 : **Invited Lectures**, Facultà di Ingegneria, Università di Pisa, Italy, Summer School on “Advanced Quantitative Methods: Applied Multivariate Data Analysis, Bootstrapping and Productivity/Efficiency Measurements”.
- 210. 15-17 October 2008, *16th Annual Meeting of The Belgian Statistical Society*, Facultés Universitaires Notre-Dame de la Paix à Namur, Wépion.
- 211. 24 November 2008, **Invited talk**, Statistics and Econometrics Seminar, Toulouse School of Economics, France, “How to explain inefficiency in productivity analysis”.
- 212. 8 December 2008, **Invited talk**, Institute for Economic Policy Research (IWW), Karlsruhe University, Germany, “How to explain inefficiency in productivity analysis”.
- 213. 15 January 2009, **Invited talk**, Wirtschaftswissenschaftliches Kolloquium, Karlsruhe University, Germany, “Nonparametric inference in efficiency analysis - recent developments and new challenges”.
- 214. 18 March 2009, **Invited talk**, Department of Economics, Michigan State University, Lansing, USA, “Frontier estimation and extreme values theory”.
- 215. 20 March 2009, **Invited talk**, Department of Economics, Rice University, Houston, USA, “Frontier estimation and extreme values theory”.
- 216. 26 March 2009, **Invited talk**, Interuniversity Attraction Pole (IAP), Institut de Statistique, Louvain-la-Neuve, “Frontier estimation and extreme values theory”.
- 217. 3 April 2009, **Invited talk**, Dipartimento di Scienze Economiche, Università di Lecce, Italy, “Nonparametric inference in efficiency analysis - recent developments and new challenges”.
- 218. 14-16 April 2009, Departement of Statistical Science, University of Bologna, Italy, Lectures on “Introduction to the Bootstrap with Applications in Econometrics”.
- 219. 20-23 April 2009, **Invited Lectures**, Dipartimento di Scienze Economiche, Università di Verona, Italy, “Bootstrap, Panacea for Statistical Inference?”.

- 220. 26-29 June 2009, **Invited Keynote Speaker and Member of the Scientific Committee**, *11th European Workshop on Efficiency and Productivity Analysis*, Pisa, Italy, “Measuring Efficiency in Productivity Analysis: Choosing a Model, implications and challenges”.
- 221. 23 November 2009, **Invited talk**, Chaire Pierre de Fermat, Région Midi-Pyrénées, Toulouse School of Economics, Toulouse, “Mesure d’efficacité et innovations en économie de la production”.
- 222. 25 March 2010, **Invited talk**, Department of Decision Sciences, Università di Bocconi, Milano, Italy, “Regularization of Non-parametric Frontier Estimators”.
- 223. 14 April 2010, **Invited Lectures**, Kiev School of Economics, Kiev, Ukraine, “Multivariate Tools for Data Analysis”.
- 224. 2-6 June 2010, *North American Productivity Workshop VI*, Department of Economics, Rice University, Houston (TX), USA, presentation of “Regularization of Non-parametric Frontier Estimators”.
- 225. 22 October 2010, **Invited talk**, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy, “Regularization of Non-parametric Frontier Estimators”.
- 226. 28 October 2010, **Invited talk**, Dipartimento di Scienze Aziendale, Centro Studi di Ingegneria Economico-Gestionale (CIEG), Università di Bologna, Italy, “Probabilistic Characterization of Directional Distances and their Robust versions”.
- 227. 30-31 March 2011, **Invited Lectures**, Department of Computer and System Sciences, University of Rome La Sapienza, Italy, “Efficiency and Productivity Analysis, the Statistical Approach”.
- 228. 10 June 2011, **Invited talk**, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy, “How to measure the impact of environmental factors in a nonparametric production model?”.
- 229. 21-25 June 2011, **Invited Member of the Scientific Committee, Discussant and Chairman of a Keynote session**, *12th European Workshop on Efficiency and Productivity Analysis*, Verona, Italy and presentation of “Statistical inference with DEA estimators of directional distances”.
- 230. 26-29 June 2011, **Invited Member of the Scientific Committee and Invited Discussant**, Workshop on *Efficiency Measurement: New methods and Applications to Food sector*, Toulouse, France.
- 231. 15 September 2011, **Invited talk**, *XIX Scuola AiLG in Ingegneria Gestionale*, Bresanone, Italy, “Recent Developments in Efficiency Analysis, Methodological approaches and new perspectives”.

- 232. 7 October 2011, **Invited talk**, Séminaire de Mathématiques de la Décision, GREMAQ, Toulouse School of Economics, “Estimation non paramétrique des frontières de production”.
- 233. 4 November 2011, **Invited Speaker**, *Workshop on Bootstrap Methods and Applications to Efficiency Analysis*, Center for Efficiency and Productivity Analysis (CEPA), School of Economics, The University of Queensland, Brisbane, Australia.
- 234. 15 December 2011, **Invited talk**, Direction des Etudes Economiques, Conférence DREN, La Poste, Paris, “Les Frontières d’Efficacité: une mesure de performance appliquée au secteur postal.
- 235. 9 March 2012, **Invited talk**, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Lecce, Italy, “Probabilistic Characterization of Directional Distances and their Robust versions”.
- 236. 15 March 2012, **Invited talk**, Banque Centrale du Luxembourg, Luxemburg. “An Invitation to the Bootstrap”.
- 237. 28, 30 March 2012, **Invited Lectures**, Department of Computer and System Sciences, University of Rome La Sapienza, Italy, “Efficiency and Productivity Analysis, the Parametric and Nonparametric Approaches and Recent Advances”.
- 238. 20 April 2012, **Invited talk**, Département de Mathématique et Institut de Recherche en Statistique, ULB, Bruxelles, “Regularization of Non-parametric Frontier Estimators”.
- 239. 24–27 April 2012, **Invited Lectures**, Department of Mathematics, KUL, Leuven, “An Introduction to the Bootstrap: Panacea for Statistical Inference?”.
- 240. 5-9 June 2012, *North American Productivity Workshop VII*, Department of Economics, Rice University, Houston (TX), USA, presentation of “Boundary Estimation in the Presence of Measurement Errors”.
- 241. 27-28 June 2012, **Invited Lectures**, Department of Computer and System Sciences, University of Rome La Sapienza, Italy, “Introduction to Nonparametric and Bootstrap Methods in Econometrics, Statistics and Management Engineering”.
- 242. 10-12 September 2012, **Invited Speaker**, *Workshop on Modern Nonparametric Methods for Time Series, Reliability & Optimization*, in Heverlee, organized by KUL Leuven, “Methodological advances and perspectives in Nonparametric Efficiency Analysis”.
- 243. 28-29 September 2012, **Invited Speaker**, *Conference Celebrating the 65th birthday of Jean-Pierre Florens*, Toulouse School of Economics, Toulouse, France, “Regularization of Non-parametric Frontier Estimators”.

- 244. 12 October 2012, **Invited talk**, Econometrics Workshop, Toulouse School of Economics, Toulouse, France, "Frontier Estimation in the Presence of Measurement Errors with unknown variance".
- 245. 9 November 2012, **Invited talk**, Joint Statistical Seminar UCL/ULB, Louvain-la-Neuve, "Central Limit Theorems for DEA/FDH Efficiency Scores".
- 246. March 2013, **Invited Lectures**, Department of Computer and System Sciences, University of Rome La Sapienza, Italy, "Efficiency and Productivity Analysis, the Parametric and Nonparametric Approaches, Recent Advances".
- 247. 4 April 2013, **Invited Speaker**, *Workshop on Nonparametric Frontier Analysis: Recent Theoretical Developments and Applications*, AES, Bucharest University of Economic Studies, Romania, "Methodological Advances and Perspectives in Nonparametric Frontier Analysis".
- 248. 19 April 2013, **Invited talk**, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università di Salento, Lecce, Italy, "Methodological Advances and Perspectives in Nonparametric Frontier Analysis".
- 249. 17-21 June 2013, **Invited Member of the Scientific Committee, invited discussant**, *13th European Workshop on Efficiency and Productivity Analysis*, Helsinki, Finland and presentation of "Measuring Firm Performance by using Nonparametric Quantile-type Distances".
- 250. 11-13 October 2013, **Invited Speaker**, *Workshop on Applicable Semiparametrics*, Center for Applied Statistics and Economics (CASE), Humboldt-Universitaät zu Berlin, Berlin, Germany. "To smooth or not to smooth: the case of discrete variables in nonparametric regression".
- 251. 15 November 2013, **Invited talk**, CEPA Workshop on Productivity and Econometrics, University of Queensland, Brisbane, Australia. "When Bias kills the Variance: Central Limit Theorems for DEA/FDH Efficiency Scores".
- 252. January to April 2014, **Invited Lectures**, Dipartimento di Scienze Economiche e Matematico-Statistiche, Università del Salento, Lecce, Italy. "Introduction to Nonparametric and Bootstrap methods in Statistics".
- 253. 12-22 March 2014, **Invited Lectures**, Department of Computer, Control and Management Engineering "A. Ruberti", Università di Roma, La Sapienza, Italy. "Nonparametric Statistics and Bootstrap Applications in Management Engineering".
- 254. 7 July, 2014, **Invited Lectures**, *Workshop on Introduction to Bootstrap Methods*, School of Economics (CEPA), University of Queensland, Brisbane, Australia.
- 255. 8-11 July, 2014, **Invited paper Session**, *10th Asia-Pacific Productivity Conference*, School of Economics (CEPA), University of Queensland, Brisbane, Australia. "Unobserved heterogeneity and endogeneity in nonparametric frontier estimation".

- 256. 8-11 July, 2014, **Invited Keynote Speaker**, *10th Asia-Pacific Productivity Conference*, School of Economics (CEPA), University of Queensland, Brisbane, Australia. “Econometric Approaches to Nonparametric Frontier Models: where we are and where we go?”.
- 257. October 2014, **Invited Speaker**, *Final Workshop*, “*Messaggeri della Conoscenza*”, Università del Salento, Lecce, Italy. “Statistical inference in nonparametric frontier models: the State of the Art”.
- 258. 5-8 December, 2014, **Invited paper Session**, *8th International Conference on Computational and Financial Econometrics, CFE-ERCIM 2014*, University of Pisa, Pisa, Italy. Presentation of 2 papers: “A nonparametric approach to dynamic discrete choice models” and “Generalized nonparametric smoothing with mixed discrete and continuous data”.
- 259. 16–17 April 2015, **Invited Lectures**, Department of Computer, Control and Management Engineering “A. Ruberti”, Università di Roma, La Sapienza, Italy. “An Introduction to Regression Methods for Continuous and Discrete Responses: From Parametric to Nonparametric Approaches”.
- 260. 14–18 June 2015, **Invited Member of the Scientific Committee**, *14th European Workshop on Efficiency and Productivity Analysis*, Helsinki, Finland and presentation of “The Wrong Skewness problem in SFA: a new approach”.
- 261. 19–23 June 2015, **Invited Member of the Scientific Committee**, *Workshop on the Econometrics and Statistics of Efficiency Analisys: Recent Developments and Perspectives*, Università del Salento, Lecce, Italy and presentation of “Nonparametric Instrumental Variables Estimation for Efficiency Frontier”.
- 262. 10–11 November 2015, **Invited Keynote Speaker**, *International Workshop on “Challenges of Big Data for Economic Modeling and Management”*, Università di Roma, Sapienza, Italy. “Efficiency Analysis, from Parametric to Nonparametric Frontier Models: the State of the Art”.
- 263. 12–14 December, 2015, **Organizer of an Invited papers Session**, *CMStatistics 2015: 8th International Conference of the ERCIM on Computational and Methodological Statistics*, University of London, London, UK. “Semi- and Non-Parametric Estimation of Frontier”.
- 264. 29 January 2016, **Invited Speaker**, *Conférence Hommage à Nicolas Nalpas*, Toulouse Business School, Toulouse, France. “Portfolio Selection in a Multi-input-multi-output setting, without Numerical Optimization”.
- 265. 10 February 2016, **Invited talk**, Aston Business School, University of Aston, Birmingham. “Unobserved Heterogeneity and Endogeneity in Nonparametric Frontier Estimation”.

- 266. 4, 6 April 2016, **Invited Lectures**, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy. “An Introduction to Regression Methods for Continuous and Discrete Responses: From Parametric to Nonparametric Approaches”.
- 267. 8–12 December 2016, **Member of the Scientific Program Committee, Organizer of an Invited papers Session**, *CMStatistics 2016: 9th International Conference of the ERCIM on Computational and Methodological Statistics*, University of Seville, Spain. Organized session “Deconvolution and Boundary Estimation” and presentation of “Inference for non-parametric stochastic frontier models”.
- 268. 9 March 2017, **Invited talk**, ORSTAT, Katholieke Universiteit Leuven, Leuven, Belgium. “Nonparametric Estimation of Efficiency in the Presence of Environmental Variables”.
- 269. 11–15 June 2017, **Invited Member of the Scientific Committee**, *15th European Workshop on Efficiency and Productivity Analysis*, London, UK, and presentation of “Nonparametric Frontier Estimation in the presence of Noise: recent developments”.
- 270. 16–18 December 2017, **Invited Co-chair of the Conference**, *CMStatistics 2017: 10th International Conference of the ERCIM on Computational and Methodological Statistics*, Birkbeck University of London, UK. Organization of a Special Invited Papers Session “Boundary Estimation and Deconvolution Problems” and presentation of an invited paper: “Statistical inference in non-parametric frontier estimation: Recent developments and dynamic extensions”.
- 271. 22, 26 March 2018, **Invited Seminars**, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy. “An Introduction to Regression Methods for Continuous and Discrete Responses: From Parametric to Nonparametric Approaches”.
- 272. 16–18 April 2018, **Invited Speaker**, *DEA40: International Conference on Data Envelopment Analysis*, Aston University, Birmingham, UK. “Statistical inference in non-parametric frontier estimation: Recent developments and dynamic extensions”.
- 273. 17 May 2018, **Invited talk**, MAD-STAT seminar, Toulouse School of Economics, Toulouse, France. “Statistical inference in non-parametric frontier estimation: Recent developments and dynamic extensions”.
- 274. 25 October 2018, **Invited Seminar**, Department of Computer, Control and Management Engineering “A. Ruberti”, Universitá di Roma, La Sapienza, Italy. “An Introduction to Nonparametric Methods and Bootstrapping with Applications”.
- 275. 24-26 January 2019, **Invited Member of the Program Committee**, *Eight Italian Congress of Econometrics and Empirical Economics, ICEEE, 2019*, presentation of “Estimation of the Boundary of a variable observed with Symmetric Error”.

276. 15 April 2019, **Invited Speaker**, *Workshop on Advances in Contemporary Statistics*, Toulouse School of Economics, Toulouse, France, presentation of “Estimation of the Boundary of a variable observed with Symmetric Error”.
277. 21 May 2019, **Invited Seminar**, Workshop in Econometrics, Toulouse School of Economics, France, “Nonparametric Stochastic Frontier Models with Multiple Inputs and Outputs”.
278. 10–13 June 2019, **Invited Member of the Scientific Committee**, *16th European Workshop on Efficiency and Productivity Analysis*, London, UK, and presentation of “Nonparametric Stochastic Frontier Models with Multiple Inputs and Outputs”.
279. 8–12 June 2020, **Invited Keynote Speaker**, *11th North American Productivity Workshop (Virtual)*, Miami Herbert Business School, University of Miami, Florida, US. Presentation of “Identification and Efficiency: Pitfalls and Virtues of Nonparametric Frontier Models”.
280. 24 March 2022, **Invited Seminar**, Toulouse Business School, Toulouse, France. “Proportional Incremental Cost Probability Functions and their Frontiers”.
281. 12 May 2022, **Invited Speaker**, *Workshop “Statistics and its Role in Societal Challenges”, 30th Anniversary of ISBA*, Louvain-la-Neuve. “Round table discussions” with Paul Embrechts, Ray Carroll and Peter Bühlmann.
282. 26–30 June 2022, **Invited Member of the Scientific Committee**, *17th European Workshop on Efficiency and Productivity Analysis*, Porto, Portugal. **Invited speaker** at the plenary session in honor of S. Grosskopf and R. Färe, “Inference for Productivity Change and its Sources. Revisiting FGNZ (AER, 1994)”, joint with Paul Wilson. Presentation of a contributed paper “Proportional Incremental Cost Probability Functions and their Frontiers”.
283. 28–29 March 2023, **Invited Speaker**, *Mini Symposium on Production Frontier and Efficiency Measure*, Toulouse Business School, Toulouse, France. “Inference in Static and Dynamic Nonparametric Models of Production for General Technologies: The State of the Art”.
284. 4–6 September 2023, **Invited Speaker**, *DEA-45, International Conference on Data Envelopment Analysis*, Surrey Business School, University of Surrey, Guilford, UK. “Inference in Dynamic, Nonparametric Models of Production for General Technologies.”
285. 29-30 April 2024, **Invited Speaker**, *Robust efficiency frontiers and heterogeneity factors in Microfinance (FERFH-MH), Workshop*, Université de Toulouse, France. “Recent Advances and Perspectives in Nonparametric Frontier and Efficiency Estimation”
286. 18–21 June 2024, **Invited Member of the Scientific Committee**, *18th European Workshop on Efficiency and Productivity Analysis*, Faro, Portugal. Presentation of a

contributed paper “Conical FDH Estimators of Directional Distances and Luenberger Production Indices for General Technologies”.

## 6 Publications

### 6.1 Articles Refereed by Peers

1. Simar, L. (1976) : Maximum Likelihood Estimation of a Compound Poisson Process, *Annals of Statistics*, 4 (6), 1200–1209, 1976.
2. Simar, L. (1977) : Prédition et moindres carrés généralisés, *Biométrie -Praximétrie*, 17 (1-2), 23–33, 1977.
3. Simar, L. (1977) : A Note on Stieltjes Moments Sequences", *SIAM Journal on Mathematical Analysis*, 8 (3), 533–534, 1977.
4. Mouchart, M. and L. Simar (1980) : Least Squares Approximations in Bayesian Analysis, with discussion, in *Bayesian Statistics, Proceedings of the First International Meeting of Bayesian Statistics*, edited by J.Bernardo, M.Degroot, D.Lindley and AFM.Smith, Valencia University press.
5. Mouchart, M. and L. Simar (1980) : Reply to the discussion on, ‘Least Squares Approximations in Bayesian Analysis”, in *Bayesian Statistics, Proceedings of the First International Meeting of Bayesian Statistics*, edited by J.Bernardo, M.Degroot, D.Lindley and AFM.Smith, Valencia University press.
6. Simar, L. (1983), Protecting Against Gross Errors, in *Specifying Statistical Models*, edited by Florens, J.P., Mouchart M., Raoult J.P., Simar L. and A.F.M. Smith, Lecture Notes in Statistics, Volume 16, Springer Verlag, New York.
7. Mouchart, M. and L. Simar (1983), Theory and Applications of Least Squares Approximations in Bayesian Analysis, in *Specifying Statistical Models*, edited by Florens, J.P., Mouchart M., Raoult J.P., Simar L. and A.F.M. Smith , Lecture Notes in Statistics, Volume 16, Springer Verlag, New York.
8. Deprins, D. and L. Simar (1983), On Farrell measures of technical efficiency, *Recherches Economiques de Louvain*, 49(2), 123–137.
9. Simar L. (1984), Discussion on “Subjective Probability Modeling with Elliptical Distributions” by J.M. Dickey and Chong-Hong Chen, in *Bayesian Statistics II, Proceedings of the 2d International Meeting of Bayesian Statistics, Valencia*, edited by J.Bernardo, M.Degroot, D.Lindley and AFM.Smith, North-Holland.
10. Simar L. (1984), Discussion on “Bayesian Techniques for Statistical Modeling” by T.J. Leonard, in *Bayesian Statistics II, Proceedings of the 2d International Meeting of Bayesian Statistics, Valencia*, edited by J.Bernardo, M.Degroot, D.Lindley and AFM.Smith, North-Holland.
11. Mouchart M. and L. Simar (1984), A note on Least Squares approximations, in the Bayesian Analysis of Regression Models, *Journal of the Royal Statistical Society, series B*, 46(1), 124–133.

12. Simar L. (1984), A Survey of Bayesian Approaches to Nonparametric Statistics, *Statistics : Mathematische Operationforchung und Statistik*, Akademie Verlag, Berlin, 15(1), 121–142.
13. Mouchart, M. and L. Simar (1984), Bayesian Prediction : Nonparametric Methods and Least Squares Approximations, in *Alternative Approaches to Time Serie Analysis*, Florens and al., eds, Proceedings of the 3rd Franco-Belgian Meeting of Statisticians, Publications des Facultés Universitaires Saint-Louis, Bruxelles.
14. Deprins, D., Simar, L. and H. Tulkens, (1984), Measuring labor inefficiency in post offices, in *The Performance of Public Enterprises: Concepts and measurements*, M. Marchand, P. Pestieau and H. Tulkens (eds.), Amsterdam : North-Holland , 243–267.
15. Deprins, D. and L. Simar (1985), A Note on the Asymptotic Relative Efficiency of the M.L.E. in a Linear Model with Gamma Disturbances, *Journal of Econometrics*, 27, 383–386.
16. Deprins, D. and L. Simar (1988), Mesures d’Efficacité de Réseaux de Chemins de Fer, in *Gestion de l’Economie et de l’Entreprise, L’approche Quantitative*, edited by CORE, 321–344, De Boeck-Wesmael, Brussels.
17. Deprins, D. et L. Simar (1989), Estimation de Fronti‘eres Déterministes avec Facteurs Exogènes d’Inefficacité", *Annales d’Economie et de Statistique*, 14, 117–150, Paris.
18. Deprins, D. and L. Simar (1989), Estimating Technical Inefficiencies with Correction for Environmental Conditions, with an application to railway companies, in *Productivity Studies of Public Transport Companies*, S.Perelman and B.Thiry editors, *Annals of Public and Cooperative Economics*, Vol 60, 1, pp 81–102, De Boeck.
19. Simar, L. (1992), Estimating Efficiencies from Frontier Models with Panel Data : a Comparison of Parametric, Non-parametric and Semi-Parametric Methods with Bootstrapping, *Journal of Productivity Analysis*, 3, 167–203.
20. Hall, P., Härdle, W. and L. Simar (1993), On the Inconsistency of Bootstrap Distribution Estimators, *Computational Statistics and Data Analysis*, 16, 11–18.
21. Park, B. and L. Simar (1994), Efficient Semiparametric Estimation in Stochastic Frontier Model, *Journal of the American Statistical Association*, vol 89, 427, 929–936.
22. Rolin, J.M. and L. Simar (1995), Discussion on “Testing for Mixtures : A Bayesian Entropic Approach” by Mengersen, K.L. and Ch. Robert, in *Bayesian Statistics V*, Proceedings of the 5th International Meeting on Bayesian Statistics, Valencia.
23. Korostelev, A., Simar, L. and A. Tsybakov (1995), Efficient Estimation of Monotone Boundaries, *Annals of Statistics*, 23(2), 476–489.
24. Hall, P., Härdle, W. and L. Simar (1995), Iterated Bootstrap with Application to Frontier Models, *Journal of Productivity Analysis*, 6, 63–76.

25. Korostelev, A., Simar, L. and A. Tsybakov (1995), On Estimation of Monotone and Convex Boundaries, *Publications des Instituts de Statistique des Universités de Paris*, 1, 3–18.
26. Simar, L. (1996), Aspects of Statistical Analysis in DEA-type Frontier Models, *Journal of Productivity Analysis*, 7, 177–185.
27. Kneip, A. and L. Simar (1996), A General framework for Frontier Estimation with Panel data, *Journal of Productivity Analysis*, 7, 187–212.
28. Ritter, C. and L. Simar (1997), Pitfalls of normal-gamma stochastic frontier models, *Journal of Productivity Analysis*, 8, 167–182.
29. Simar, L. and P. Wilson (1998), Sensitivity of efficiency scores : How to bootstrap in Nonparametric frontier models, *Management Sciences*, 44, 1, 49–61.
30. Park, B., Sickles R.C. and L. Simar (1998), Stochastic Panel Frontiers : A Semiparametric Approach, *Journal of Econometrics*, 84, 273–301.
31. Kneip, A., B. Park and L. Simar (1998), A Note on the Convergence of Nonparametric DEA Estimators for Production Efficiency Scores, *Econometric Theory*, 14, 783–793.
32. Simar, L. and P. Wilson (1999), Some problems with the Ferrier/Hirschberg Bootstrap Idea, *Journal of Productivity Analysis*, 11, 67–80.
33. Simar, L. and P. Wilson (1999), Of Course we can bootstrap DEA scores ! But does it mean anything ? Logic trumps wishful thinking, *Journal of Productivity Analysis*, 11, 93–97.
34. Gijbels, I., E. Mammen, B.U. Park and L. Simar (1999), On Estimation of Monotone and Concave Frontier Functions, *Journal of the American Statistical Association*, vol 94, 445, 220–228.
35. Simar, L. and P. Wilson (1999), Estimating and Bootstrapping Malmquist Indices, *European Journal of Operational Research*, 115, 459–471.
36. Simar L. and P. Wilson (2000)<sup>1</sup> Statistical Inference in Nonparametric Frontier Models: The State of the Art, *Journal of Productivity Analysis*, 13, 49–78.
37. Simar L. and P. Wilson (2000), A General Methodology for Bootstrapping in Nonparametric Frontier Models, *Journal of Applied Statistics*, Vol 27, 6, 779–802.
38. Park, B. Simar, L. and Ch. Weiner (2000), The FDH Estimator for Productivity Efficiency Scores: Asymptotic Properties, *Econometric Theory*, Vol 16, 855–877.

---

<sup>1</sup>This paper has been determined in 2002, by the ISI Essential Science Indicators, as a “Fast Breaking Paper”, being one of the most cited papers in the world, in the field of “Economics and Business”, end of 2001, beginning of 2002.

39. Simar L. and P. Wilson (2001), Testing Restrictions in Nonparametric Efficiency Models, *Communications in Statistics, simulation and computation*, 30 (1), 159–184.
40. Simar L. and P. Wilson (2001), Application del bootstrap con estimadores DEA, in *La Medicion de la Eficiencia y la Productividad*, Antonio Alvarez Pinilla (ed.), Piramide, Madrid, pp 299–327.
41. Cazals, C. Florens, J.P. and L. Simar (2002), Nonparametric Frontier Estimation: a Robust Approach , in *Journal of Econometrics*, 106, 1–25.
42. Simar L. and P. Wilson (2002), Nonparametric Test of Return to Scale, *European Journal of Operational Research*, 139, 115–132.
43. Climov, D., Hart, J. and L. Simar (2002), Automatic Smoothing and Estimation in Single Index Poisson Regression, *Journal of Nonparametric Statistics*, 14(3), 307–323.
44. Hall, P. and L. Simar (2002), Estimating a Changepoint, Boundary or Frontier in the Presence of Observation Error, *Journal of the American Statistical Association*, 97, 523–534.
45. Climov, D., Delecroix M. and L. Simar (2002), Semiparametric Estimation in Single index Poisson Regression: a practical approach, *Journal of Applied Statistics*, vol 29, 7, 1047–1070.
46. Simar, L. (2003), Detecting Outliers in Frontiers Models: a Simple Approach, *Journal of Productivity Analysis*, 20, 391–424.
47. Park, B., R. Sickles and L. Simar (2003), Semiparametric Efficient Estimation of AR(1) Panel Data Models, *Journal of Econometrics*, vol 117, 2, 279–309.  
Corrigendum to "Semiparametric-efficient estimation of AR(1) panel data models", *Journal of Econometrics*, vol 117, 2, 311.
48. Beguin, Cl. and L. Simar (2004), Analysis of the Expenses Linked to Hospital Stays: How to Detect Outliers, *Health Care Management Science*, 7, 89–96.
49. Simar, L., and P.W. Wilson (2004), Performance of the bootstrap for DEA estimators and iterating the principle, in *Handbook on Data Envelopment Analysis*, W.W. Cooper, L.M. Seiford and J. Zhu, editors, Kluwer.
50. Florens, J.P. and L. Simar, (2005), Parametric Approximations of Nonparametric Frontier, *Journal of Econometrics*, vol 124, 1, 91–116
51. Daraio, C. and L. Simar (2005), Introducing environmental variables in nonparametric frontier models: a probabilistic approach, *Journal of Productivity Analysis*, vol 24, 1, 93–121.
52. De Macq, I. and L. Simar (2005), Hyperrectangular Space Partitioning Trees, a practical approach, *Computational Statistics*, vol 20, 1, 119–136.

53. Daouia, A. and L. Simar (2005), Robust Nonparametric Estimators of Monotone Boundaries, *Journal of Multivariate Analysis*, 96, 311–331.
54. Bonacorsi, A., Daraio, C. and L. Simar (2006), Size, scope and trade-off in the productivity of universities: an application of robust nonparametric methods to Italian data. *Scientometrics*, vol 66, 2, 389–410.
55. Daraio, C. and L. Simar (2006), A Robust Nonparametric Approach to Evaluate and Explain the Performance of Mutual Funds, *European Journal of Operational Research*, vol 175, 1, 516–542.
56. Jeong, S.O. and L. Simar (2006), Linearly interpolated FDH efficiency score for non-convex frontiers, *Journal of Multivariate Analysis*, 97, 2141–2161.
57. Simar, L. and V. Zelenyuk (2006), On Testing Equality of Two Distribution Functions of Efficiency Score Estimated via DEA, *Econometric Reviews*, 25(4), 497–522.
58. Simar, L and P. Wilson (2007), Estimation and Inference in Two-Stage, Semi-Parametric Models of Production Processes, *Journal of Econometrics*, vol 136, 1, 31–64.<sup>2</sup>
59. Park, B., R. Sickles and L. Simar (2007), Semiparametric Efficient Estimation in Dynamic Panel Data Models, *Journal of Econometrics*, vol 136, 1, 281–301.
60. Kumbhakar, S.C. , Park, B.U., Simar, L. and E.G. Tsionas (2007), Nonparametric stochastic frontiers: a local likelihood approach, *Journal of Econometrics*, 137, 1, 1–27.
61. Daouia, A. and L. Simar (2007), Nonparametric efficiency analysis: a multivariate conditional quantile approach, *Journal of Econometrics*, 140, 375–400.
62. Daraio, C. and L. Simar (2007), Conditional nonparametric frontier models for convex and non convex technologies: a unifying approach, *Journal of Productivity Analysis*, vol 28, 13–32.
63. Simar, L. (2007), How to Improve the Performances of DEA/FDH Estimators in the Presence of Noise, *Journal of Productivity Analysis*, vol 28, 183–201.
64. Simar, L. and V. Zelenyuk (2007), Statistical Inference for Aggregates of Farrell-type Efficiencies, *Journal of Applied Econometrics*, vol 22, 7, 1367–1394.
65. Li, S.-K., Simar, L., Wilson, P.W. and V. Zelenyuk (2008), Introduction for the Special Issue on Transitioning Economics, *Journal of Productivity Analysis*, vol 29, 77.

---

<sup>2</sup>This paper was classified by *Scopus* as the “Last 5 Years Most Cited Article” in the *Journal of Econometrics* in 2011, 2012 and 2013.

66. Simar, L. and P.W. Wilson (2008), Statistical Inference in Nonparametric Frontier Models: recent developments and perspectives, in *The Measurement of Productive Efficiency and Productivity Growth*, 2nd Edition, Harold Fried, C.A.Knox Lovell and Shelton Schmidt, editors, Oxford University Press, 421–521.
67. Daouia, A., J.P. Florens and L. Simar (2008), Functional Convergence of Quantile-type Frontiers with Application to Parametric Approximations, *Journal of Statistical Planning and Inference*, 138, 708–725.
68. Park, B., L. Simar and V. Zelenyuk (2008), Local Likelihood Estimation of Truncated Regression and its Partial Derivatives: Theory and Application, *Journal of Econometrics*, 146, 185–198.
69. Kneip, A, L. Simar and P.W. Wilson (2008), Asymptotics and consistent bootstraps for DEA estimators in non-parametric frontier models, *Econometric Theory*, 24, 1663–1697.
70. Badin, L. and L. Simar (2009), A bias corrected nonparametric envelopment estimator of frontiers, *Econometric Theory*, 25, 5, 1289–1318.
71. Badin, L., Daraio, C. and L. Simar (2010), Optimal Bandwidth Selection for Conditional Efficiency Measures: a Data-driven Approach, *European Journal of Operational Research*, 201, 633–640
72. Jeong, S.O. , B. U. Park and L. Simar (2010), Nonparametric conditional efficiency measures: asymptotic properties. *Annals of Operations Research*, 173, 105–122.
73. Simar, L. and P.W. Wilson (2010), Inference From Cross-Sectional Stochastic Frontier Models. *Econometric Review*, 29, 1, 62–98.
74. Daskovska, A., Simar, L. and S. Van Bellegem (2010), Forecasting the Malmquist productivity index. *Journal of Productivity Analysis*, 33, 97–107.
75. Park, B.U., Jeong, S.-O. and L. Simar (2010), Asymptotic Distribution of Conical-Hull Estimators of Directional Edges. *Annals of Statistics*, Vol 38, 6, 1320–1340.
76. Geenens, G. and L. Simar (2010), Nonparametric test for conditional independence in two-way contingency tables. *Journal of Multivariate Analysis*, 101, 765–788.
77. Daouia, A., Florens, J.P. and L. Simar (2010), Frontier estimation and extreme values theory. *Bernoulli*, 16(4), 1039–1063.
78. Simar, L. and V. Zelenyuk (2011), Stochastic FDH/DEA estimators for frontier analysis. *Journal of Productivity Analysis*, 36, 1–20.
79. Simar, L. and P.W. Wilson (2011), Inference by the  $m$  out of  $n$  bootstrap in nonparametric frontier models. *Journal of Productivity Analysis*, 36, 33–53.

80. Schubert, T. and L. Simar (2011), Innovation and export activities in the German mechanical engineering sector: an application of testing restrictions in production analysis. *Journal of Productivity Analysis*, 36, 55–69.
81. Geenens, G. and L. Simar (2011), Single-index modeling of conditional probabilities in two-way contingency tables. *Statistics*, 45, 451–478.
82. Daraio,C. et al. (2011), (collective paper), The European university landscape: A micro characterization based on evidence from the Aquameth project, *Research Policy*, 40, 148–164.
83. Kneip, A., Simar, L. and P.W. Wilson (2011), A Computational Efficient, Consistent Bootstrap for Inference with Non-parametric DEA Estimators. *Computational Economics*. , 38,483–515.
84. Simar, L. and P.W. Wilson (2011), Two-Stage DEA: *Caveat Emptor*. *Journal of Productivity Analysis*, 36, 205–218.
85. Simar, L., and P.W. Wilson (2011), Performance of the bootstrap for DEA estimators and iterating the principle, in *Handbook on Data Envelopment Analysis*, Second Edition, W.W. Cooper, L.M. Seiford and J. Zhu, editors, *International Series in Operations Research & Management Sciences*, Springer, New-York, 241–271.
86. Schaffer, A., Simar, L. and J. Rauland (2011), Decomposing Regional Efficiency. *Journal of Regional Science*, Vol 51, 5, 931–947.
87. Simar, L. and A. Vanhems (2012), Probabilist Characterization of Directional Distances and their Robust versions. *Journal of Econometrics*, 166, 342–354.
88. Simar, L., Vanhems, A. and P.W. Wilson (2012), Statistical inference with DEA estimators of directional distances, *European Journal of Operational Research*, 220, 853–864.
89. Daouia, A., Florens, J.P. and L. Simar (2012), Regularization of Non-parametric Frontier Estimators, *Journal of Econometrics*, 168, 285–299.
90. Badin, L., Daraio, C. and L. Simar (2012), How to measure the impact of environmental factors in a nonparametric production model. *European Journal of Operational Research*, 223, 818–833.
91. Simar, L. and P.W. Wilson (2013), Estimation and inference in nonparametric frontier models: Recent developments and perspectives, *Foundations and Trends in Econometrics*, Vol. 5: No 3-4, pp 183–337.
92. Bonacorsi A., Daraio C., Simar L. (2013), What is the impact of scale and specialization on the research efficiency of European universities?, in J. Gorraiz, E. Schiebel, C. Gumpenberger, M. Horlesberger and H. Moed eds., *Proceedings of ISSI 2013*, Vienna, Vol. 2, pp. 1817–1829 (ISBN: 978-3-200-03135-7).

93. Florens, J.P., Simar, L. and I. Van Keilegom (2014), Frontier Estimation in Nonparametric Location-Scale Models, *Journal of Econometrics*, 178, 456–470.
94. Badin, L., Daraio, C. and L. Simar (2014), Explaining Inefficiency in Nonparametric Production Models: the State of the Art, *Annals of Operations Research*, 214, 5–30.
95. Daraio, C. and L. Simar (2014) Directional Distances and their Robust Versions: Computational and Testing Issues, *European Journal of Operational Research*, 237, 358–369.
96. Kneip, A., Simar, L. and I. Van Keilegom (2015), Frontier estimation in the presence of measurement error with unknown variance, *Journal of Econometrics*, 184, 2, 379–393.
97. Daraio, C., Bonacorsi, A. and L. Simar (2015), Rankings and university performance: a conditional multidimensional approach. *European Journal of Operational Research*, 244, 918–930.
98. Kneip, A., Simar, L. and P.W. Wilson (2015), When bias kills the variance: Central Limit Theorems for DEA and FDH efficiency scores, *Econometric Theory*, 31, 394–422.
99. Park, B., Simar, L. and V. Zelenyuk (2015), Categorical data in local maximum likelihood: theory and application to productivity analysis, *Journal of Productivity Analysis*, 43, 199–214.
100. Daraio, C., Bonacorsi, A. and L. Simar (2015), Efficiency and economies of scale and specialization in European universities: a directional distance approach. *Journal of Informetrics*, 9, 430–448.
101. Simar, L. and P.W. Wilson (2015), Statistical Approaches for Nonparametric Frontier Models: A Guided Tour, *International Statistical Review*, 83, 1, 77–110.
102. Mastromarco, C. and L. Simar (2015), Effect of Time and FDI on Catching-up: news insights from a Conditional Nonparametric Frontier Analysis, *Journal of Applied Econometrics*, 30, 826–847.
103. Cazals, C., Fève F., Florens, J.P. and L. Simar (2016), Nonparametric Instrumental Variables estimation for efficiency frontier, *Journal of Econometrics*, 190, 349–359.
104. Simar,L. , Vanhems, A. and I. Van Keilegom (2016), Unobserved Heterogeneity and Endogeneity in Nonparametric Frontier Estimation, *Journal of Econometrics*, 190, 360–373.
105. Daraio, C. and L. Simar (2016) Efficiency and Benchmarking with Directional Distances: a Data Driven Approach, *Journal of the Operational Research Society*, 2016, 1–17.
106. Li, D., Simar, L. and V. Zelenyuk (2016), Generalized nonparametric smoothing with mixed discrete and continuous data, *Computational Statistics and Data Analysis*, 100, 424–444.

107. Kneip, A., Simar, L. and P.W. Wilson (2016), Testing Hypothesis in Nonparametric Models of Production, *Journal of Business and Economic Statistics*, 34:3, 435–456.
108. Henderson, D.J., Simar, L. and L. Wang (2017), The Three Is of Public Schools: Irrelevant Inputs, Insufficient Resources and Inefficiency, *Applied Economics*, 49:12, 1164–1184.
109. Park, B.U., Simar, L. and V. Zelenyuk (2017), Nonparametric Estimation of Dynamic Discrete Choice Models for Time series Data, *Computational Statistics and Data Analysis* 108, 97–120.
110. Daouia, A., Simar, L. and P.W. Wilson (2017), Measuring Firm Performance Using Nonparametric Quantile-type Distances, *Econometric Review*, 36, 1-3, 156–181.
111. Simar, L., Van Keilegom, I. and V. Zelenyuk (2017), Nonparametric Least Squares Methods for Stochastic Frontier Models, *Journal of Productivity Analysis*, 47, 189–204.
112. Nalpas, N., Simar, L. and A. Vanhems (2017), Portfolio Selection in a Multi-Moment Setting: A Simple Monte-Carlo-FDH Algorithm, *European Journal of Operational Research*, 263, 308–320.
113. Mastromarco, C. and L. Simar (2018), Globalization and Productivity: a Robust Nonparametric World Frontier Analysis, *Economic Modelling*, 69, 134–149.
114. Simar, L. and V. Zelenyuk (2018), Central Limit Theorems for Aggregate Efficiency, *Operations Research*, 66, 1, 137–149.
115. Hafner, Ch. , Manner, H. and L. Simar (2018), The “Wrong Skewness” Problem in Stochastic Frontier Models: a new approach, *Econometric Review*, 37, 4, 380–400.
116. Daraio, C., Simar, L. and P.W. Wilson (2018), Central Limit Theorems for Conditional Efficiency Measures and Tests of the "Separability" Condition in Nonparametric, Two-Stage Models of Production, *Econometrics Journal*, 21, 170–191.
117. Simar, L. and P. W. Wilson (2019), Central Limit Theorems and Inference for Sources of Productivity Change Measured by Nonparametric Malmquist Indices, *European Journal of Operational Research*, 277, 756–769.
118. Badin, L., Daraio, C. and L. Simar (2019), A Bootstrap Approach for Bandwidth Selection in Estimating Conditional Efficiency Measures, *European Journal of Operational Research*, 277, 784–797.
119. Daniel, B., Hafner, C., Manner, H and L. Simar (2019), Asymmetries in Business Cycles and the Role of Oil Prices. *Macroeconomic Dynamics*, 23, 1622–1648.

120. Mastromarco, C., Simar, L. and P.W. Wilson (2019), Nonparametric Statistical Analysis of Production, in *The Palgrave Handbook of Economic Performance Analysis*, T. ten Raa and W.H. Greene, eds, Palgrave Macmillan, Springer Nature, Switzerland, 301–382.
121. Simar, L. and P.W. Wilson (2020), Technical, allocative and overall efficiency: Estimation and inference. *European Journal of Operational Research*, 282, 1164–1176.
122. Florens, J.P., Simar, L. and I. Van Keilegom (2020), Estimation of the Boundary of a Variable Observed with Symmetric Error. *Journal of the American Statistical Association*, 115:529, 425–441.
123. Simar, L. and V. Zelenyuk (2020), Improving finite sample approximation by central limit theorems for estimates from Data Envelopment Analysis. *European Journal of Operational Research*, 284, 1002–1015.
124. Daouia, A., Florens, J.P. and L. Simar (2020), Robust frontier estimation from noisy data: a Tikhonov regularization approach. *Econometrics and Statistics*, 14, 1–23.
125. Daraio, C., Simar, L. and P.W. Wilson (2020), Fast and Efficient Computations of Directional Distances Estimators. *Annals of Operations Research*, 288, 805–835.
126. Simar, L. and P.W. Wilson (2020), Hypothesis Testing in Nonparametric Models of Production using Multiple Sample Splits. *Journal of Productivity Analysis*, 53, 287–303.
127. Park, B.U., Simar, L and V. Zelenyuk (2020), Forecasting of Recessions via Dynamic Probit for Time Series: Replication and Extension of Kauppi and Saikkonen (2008), *Empirical Economics*, 58, 1, 379–392.
128. Mastromarco, C. and L. Simar (2021), Latent Heterogeneity to Evaluate the Effect of Human Capital on World Technology Frontier. *Journal of Productivity Analysis*, 55, 71–89.
129. Daouia, A., Florens, J.P. and L. Simar (2021), Robustified expected maximum production frontiers. *Econometric Theory*, 37, 346–387.
130. Kneip, A. , Simar, L. and P.W. Wilson (2021), Inference in Dynamic, Nonparametric Models of Production: Central Limit Theorems for Malmquist Indices. *Econometric Theory*, 37, 537–572.
131. Mastromarco, C., Simar, L. and V. Zelenyuk (2021), Predicting Recessions with a Frontier Measure of Output Gap: Application to Italian Economy. *Empirical Economics*, 60, 2701–2740.
132. Daraio, C., Simar, L. and P.W. Wilson (2021), Quality as a Latent Heterogeneity Factor in the Efficiency of Universities. *Economic Modelling*, 99, 105485.

133. Fall, F.S., Tchuigoua,H.T., Vanhems, A. and , L. Simar (2021), Gender effect on social microfinance efficiency: A robust nonparametric approach. *European Journal of Operational Research*, 295, 2, 744–757.
134. Nguyen, B.H., Simar, L. and V. Zelenyuk (2022), Data sharpening for improving central limit theorem approximations for data envelopment analysis-type efficiency estimators. *European Journal of Operational Research*, 303, 3, 1469–1480.
135. Simar, L., Zelenyuk, V. and S. Zhao (2023), Further Improvements of Finite Sample Approximation of Central Limit Theorems for Envelopment Estimators, *Journal of Productivity Analysis*, 59, 189–194.
136. Simar, L. and P. W. Wilson (2023), Nonparametric, Stochastic Frontier Models with Multiple Inputs and Outputs, *Journal of Business and Economic Statistics*, 41, 4, 1391–1403.
137. O'Loughlin, C., Simar, L. and P.W. Wilson (2023), Methodologies for assessing government efficiency, *Handbook on Public Sector Efficiency*, A. Afonso, A. Venancio and J. Jalles, eds, Edward Elgar Publishing, pp 72–101.
138. Simar, L. and P. W. Wilson (2023), Another Look at Productivity Growth in Industrialized Countries, *Journal of Productivity Analysis*, 60, 257–272.
139. Fève, F., Florens, J.P and L. Simar (2023), Proportional Incremental Cost Probability Functions and their Frontiers, *Empirical Economics*, 64, 2721–2756.
140. Simar, L., Zelenyuk, V. and S. Zhao (2024), Inference for Aggregate Efficiency: Theory and Guidelines for Practitioners, *European Journal of Operational Research*, 316, 240–254.
141. Parmeter, C., Simar, L. Van Keilegom, I. and V. Zelenyuk (2024), Inference in the Nonparametric Stochastic Frontier Model, *Econometric Reviews*: 43:7, 518–539. <https://doi.org/10.1080/07474938.2024.2339193>
142. Pham, M.D., Simar, L. and V. Zelenyuk (2024), Statistical Inference for Aggregation of Malmquist Productivity Indices, *Operations Research* 72(4), 1615–1628.
143. Daraio, C. and L. Simar (2024), Approximations and Inference for Nonparametric Production Frontiers, *Journal of Productivity Analysis*, 62:197–215. <https://doi.org/10.1007/s11123-024-00726-2>
144. Daraio, C., Di Leo, S. and L. Simar (2024), Viable eco-efficiency targets for waste collection communities, *Scientific Reports*, 14:15038, 1–15. <https://doi.org/10.1038/s41598-024-66077-y>
145. Simar, L. and P. W. Wilson (2024), Inference in Dynamic, Nonparametric Models of Production for General Technologies, *Advances in the Theory and Applications of*

*Performance Measurement and Management*, Emrouznejad, A., Thanassoulis, E. and M. Toloo, eds., Lecture Notes in Operations Research Series, Springer, pp 9–20.

146. Hohage, T., Marechal, P., Simar, L. and A. Vanhems (2024), A mollifier approach to the deconvolution of probability densities, *Econometric Theory*, 40, 320–359. <https://doi.org/10.1017/S0266466622000457>
147. Fall, F.S., Tchuigoua, H.T., Vanhems, A. and L. Simar (2024), Investigating the unobserved heterogeneity effect on outreach of women: lessons from microfinance institutions, LIDAM Discussion paper ISBA 2022/10, UCL, to appear in *Annals of Operations Research*. <https://doi.org/10.1007/s10479-023-05353-y>
148. Daraio, C., Di Leo, S. and L. Simar (2024), Impact of a Regulatory Target and External Factors on the Waste Efficiency of Italian Municipalities, LIDAM Discussion paper ISBA 2023/18, UCL to appear in *Waste Management & Research*. <https://doi.org/10.1177/0734242X241262698>
149. D'Adamo, I., Daraio, C., Di Leo, S. and L. Simar (2024), A flexible and sustainable analysis of waste efficiency at the European level, to appear in *Global Journal of Flexible Systems Management*.
150. Simar, L. and P. W. Wilson (2024), New Tools for Evaluating the Performance of Health-Care Providers using DEA and FDH Estimators, LIDAM Discussion paper ISBA 2022/06, UCL, to appear in Grosskopf, S., Valdmanis, V. and V. Zelenyuk, eds. *The Cambridge Handbook of Productivity, Efficiency in Healthcare*, Cambridge, UK: Cambridge University Press.
151. Mastromarco, C., Simar, L. and I. Van Keilegom (2024), Estimating Nonparametric Conditional Frontiers and Efficiencies: A New Approach, LIDAM Discussion paper ISBA 2022/35, UCL, to appear in *The Econometrics Journal*.
152. Simar, L., Zelenyuk, V. and S. Zhao (2024), Statistical Inference for Hicks-Moorsteen Productivity Indices, LIDAM Discussion paper ISBA 2023/32, UCL, to appear in *Annals of Operations Research*.

## 6.2 Books

153. Kestemont, M.P. , Poulain M. et L. Simar (1987), *Statistique Descriptive*, De Boeck Université, Bruxelles.
154. Härdle, W. and L. Simar (2003, 2007, 2012, 2015, 2019), *Applied Multivariate Statistical Analysis*, Fifth Edition, 558p., Springer-Verlag, Berlin.
155. Daraio, C. and L. Simar (2007), *Advanced Robust and Nonparametric Methods in Efficiency Analysis: Methodology and Applications*, Springer, New-York.

### 6.3 Chapters in Books

156. Simar, L. (1977), Présentation générale des méthodes de classification dans le cadre de l'analyse multivariée, *Actes de la Chaire Quetelet*, Editions Ordina, Liège, 1977.
157. Simar, L. (1978), Inférence relative à la dispersion, in *Méthodes Non-Paramétriques*, M. Mouchart et L. Simar, eds, Série Recyclage en Statistique, volume 2, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
158. Simar, L. (1978), Statistiques linéaires de rang, in *Méthodes Non-Paramétriques*, M. Mouchart et L. Simar, eds, Série Recyclage en Statistique, volume 2, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
159. Simar, L. (1979), Tables de Contingence à deux critères, problèmes particuliers des tables  $2 \times 2$ , in *Analyse des Données Discrètes*, G. Gérard et J.M. Rolin, eds, Série Recyclage en Statistique, volume 3, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
160. Simar, L. (1979), Tables de Contingence à plusieurs critères, in *Analyse des Données Discrètes*, G. Gérard et J.M. Rolin, eds, Série Recyclage en Statistique, volume 3, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
161. Simar, L. (1980), Approches Descriptives I : Métriques de Discrimination, in *Analyse Discriminante*, Bragard, L., Richard, JF and L. Simar, eds., Série Recyclage en Statistique, volume 4, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
162. Simar, L. (1981), Utilisation de variables auxiliaires : estimation par le quotient et par la régression, in *Enquêtes et Sondages*, M. Mouchart and J.M. Rolin, eds. Série Recyclage en Statistique, volume 5, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
163. Simar L. (1986), Introduction à l'Algèbre utile en Analyse de la Variance, in *Analyse de la Variance*, J. Paris and J. Delincé (eds), Série Recyclage en Statistique, volume 6, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
164. Simar L. (2002), Le Paradigme Bayésien, in *Méthodes Bayésiennes en Statistique*, J.J. Droesbeke, J. Fine, G. Saporta, eds., Edition Tecnicip, Paris.
165. Simar L. (2002), Les Modèles de Base de l'Analyse Bayésienne, in *Méthodes Bayésiennes en Statistique*, J.J. Droesbeke, J. Fine, G. Saporta, eds., Edition Tecnicip, Paris.
166. Bonacorsi, A., Daraio, C. and L. Simar (2007), Efficiency and productivity in European Universities. Exploring trade-offs in the strategic profile, in Bonacorsi, A. and C. Daraio, eds, *Universities and Strategic Knowledge Creation: Specialization and Performance in Europe*, PRIME Series on Research and Innovation Policy in Europe. Edward Elgar Publishing, Limited, Cheltenham, UK.

167. Bonaccorsi, A., Daraio, C., Räty, T. and L. Simar (2007), Efficiency and University size: discipline-wise evidence from the European Universities, in *Hyvinvointipalvelujen Tuottavuus: Tuloksia opintien varrelta*, VATT Publications, Helsinki, Finland.
168. Bonaccorsi, A., Daraio, C. and L. Simar (2014), Scale and research specialization in European Universities: a directional distance approach to teaching efficiency, in Bonaccorsi, A. , ed, *Knowledge, Diversity and Performance in European Higher Education: A Changing Landscape*, Edward Elgar Publishing, Limited, Cheltenham, UK.

#### 6.4 Books as Editor, Co-Editor or Associate Editor

169. Mouchart, M. et L. Simar, eds. (1978) : *Méthodes Non-Paramétriques*, Série Recyclage en Statistique, volume 2, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
170. Bragard, L. , Richard, JF et L. Simar, eds. (1980), *Analyse Discriminante*, Série Recyclage en Statistique, volume 4, Université Catholique de Louvain, Facultés Universitaires Saint-Louis.
171. Florens, J.P., Mouchart M., Raoult J.P., Simar L. and A.F.M. Smith (1983), Editors, *Specifying Statistical Models*, Proceedings of the 2d Franco-Belgian Meeting of Statisticians, Lecture Notes in Statistics, Volume 16, Springer Verlag, New York.
172. Florens, J.P., Mouchart M., Raoult J.P. and L. Simar (1984), editors, *Alternative Approaches to Time Series Analysis*, Proceedings of the 3rd Franco-Belgian Meeting of Statisticians, Publications des Facultés Universitaires Saint-Louis, Bruxelles.
173. Florens, J.P., Mouchart M., Raoult J.P. and L. Simar (1985), editors, *Model Choice*, Proceedings of the 4th Franco-Belgian Meeting of Statisticians, Publications des Facultés Universitaires Saint-Louis, Bruxelles.
174. Simar L. (1986), Assistant Editor, *Asymptotic Theory for non iid Processes*, edited by J.P. Florens, Proceedings of the 5th Franco-Belgian Meeting of Statisticians, Publications des Facultés Universitaires Saint-Louis, Bruxelles.
175. Simar L. (1987), Assistant Editor, *Spatial Processes and Spatial Time Series Analysis*, edited by F. Drosbeke, Proceedings of the 6th Franco-Belgian Meeting of Statisticians, Publications des Facultés Universitaires Saint-Louis, Bruxelles.
176. Simar, L. (1988), Assistant Editor, *Méthodes Bayesiennes: nouvelles tendances et expériences récentes*, edited by M. Hallin, Proceedings of the 8th Franco-Belgian Meeting of Statisticians, *Cahiers du CERO*, Volume 30, 4, pp 201–290.
177. Simar L. (1990), Assistant Editor, *Statistique et Calcul Scientifique*, edited by J.P. Florens and J.P. Raoult, Proceedings of the 7th Franco-Belgian Meeting of Statisticians, *Cahiers du CERO*, vol 32, 1-2-3, pp1–224, Bruxelles.

- 178. Härdle, W. and L. Simar, (1993), Eds., *Computer Intensive Methods in Statistics*, Proceedings of the 12th Franco-Belgian Meeting of Statisticians, in *Statistics and Computing*, vol 1, Physica Verlag.
- 179. Li, S.-K., Simar, L., Wilson, P.W. and V. Zelenyuk (2008), Eds, Special Issue on *Transitionning Economics*, *Journal of Productivity Analysis*, vol 29, 77–191.

## 6.5 Articles Submitted

- 180. Kneip, A., Simar, L. and P.W. Wilson (2022), Conical FDH Estimators of General Technologies, with Applications to Returns to Scale and Malmquist Productivity Indices, LIDAM Discussion paper ISBA 2022/24, UCL.
- 181. Briére, M., Simar, L., Szafarz, A. and A. Vanhems (2023), Sensitivity to measurement errors of the distance to the efficient frontier, LIDAM Discussion paper ISBA 2023/17, UCL.
- 182. Daraio, C., Di Leo, S. and L. Simar (2024), Conical FDH Estimators of Directional Distances and Luenberger Production Indices for General Technologies, LIDAM Discussion paper ISBA 2024/09, UCL.
- 183. Simar, L., Zelenyuk, V. and S. Zhao (2024), Central Limit Theorems for Directional Distance Functions with or without Undesirable Outputs, LIDAM Discussion paper ISBA 2024/10, UCL.
- 184. Simar, L. and P.W. Wilson (2024), A Fast Method for Implementing Hypothesis Tests with Multiple Sample Splits in Nonparametric Models of Production, LIDAM Discussion paper ISBA 2024/12, UCL.
- 185. Fall, F.S., Tchuigoua, H.T., Vanhems, A. and L. Simar (2024), A Panel Analysis of Microfinance Efficiency Measures: Evidence on the effects of unobserved managerial ability, LIDAM Discussion paper ISBA 2024/\*\*, UCL.

## 6.6 Work in Progress

- 186. Badin, L., Patilea, V. and L. Simar (2019), Confidence Intervals for Efficiency Scores in Non-convex Technologies
- 187. Simar, L., Van Keilegom, I. and P. W. Wilson (2019), Testing Stochastic Dominance in Nonparametric Frontier Models.
- 188. Daraio, C., Simar, L. and P. W. Wilson (2019), Testing Restrictions in Nonparametric Frontier Models: new insights.
- 189. Cazals, C., Florens, J.P and L. Simar (2022), Single index Models for Nonparametric Conditional Frontiers.

190. Daouia, A., Florens, J.P and L. Simar (2022), Nonparametric Frontier Models for Panel Data.
191. Daouia, A. and L. Simar (2022), A Robustified Probability-Weighted-Moment Measure of Production Performance.
192. Mastromarco, C. and L. Simar (2024), Productivity in EU Regions: New Insights from a Conditional Nonparametric Frontier Analysis.
193. Fève, F., Florens, J.P. and L. Simar (2024), Simultaneous Estimation of a Regression and a Frontier: Application to the Gaz Distribution.

## 6.7 Textbooks and Tutorials

194. Simar, L. (2007), *Multivariate Data Analysis*, manuscript, 256p., Institut de Statistique, Université Catholique de Louvain.
195. Simar, L. (2000), *Statistique en Economie et Gestion*, manuscript, 248p., Institut de Statistique, Université Catholique de Louvain.
196. Simar, L. (2008), *An Introduction to Multivariate Data Analysis*, manuscript, 247p., Institut de Statistique, Université Catholique de Louvain.
197. Simar, L. (2008), *An Invitation to the Bootstrap: Panacea for Statistical Inference?*, 178p., Institut de Statistique, Université Catholique de Louvain.
198. Simar, L. and P. Wilson (2008), *Efficiency Analysis: the Statistical Approach*, Lectures Notes, 269p., Institut de Statistique, Université Catholique de Louvain.