

40, bd du Pont d'Arve, CH-1211
Tel: +41 22 379 8807
maria-pia.victoriafeser@unige.ch

Born 24/09/65,
Swiss (GE),
married, 3 children

Maria-Pia Victoria-Feser

Professor of Statistics - University of Geneva

Academic career

- | | |
|-----------|---|
| Education | <ul style="list-style-type: none">• Graduated (master) in 1989 in econometrics at the University of Geneva• Research student at the London School of Economics (LSE) in 1991-92• Ph. D. in econometrics and statistics (University of Geneva) in 1993 |
| Positions | <ul style="list-style-type: none">• Lecturer in statistics at the LSE in 1993-96• Assistant professor (MER) in statistics at the Faculty of psychology and educational sciences (FPSE) at the University of Geneva (poste de la relève) in 1997-2000• Associate professor (SNF prof. boursier) at the FPSE and the department of econometrics in 2000-2005 (only at the FPSE from 2001 to 2005)• Full professor in statistics at HEC-Genève (50% position), 2001-2013• Full professor in statistics at the Geneva School of Economics and Management, University of Geneva, since 2014 (full time). |

Academic functions (selection)

- | | |
|------------|--|
| Directions | <ul style="list-style-type: none">• Director of the Research Center for Statistics, GSEM, since 2017.• Founding Dean of the Geneva School of Economics and Management, University of Geneva, 2014-2017.• Founding Director of the Research Center for Statistics, SES, 2011-2013.• Founding Director of the Ph. D. in Statistics, SES, 2009-2013.• Founding Director of the Master of Science in Statistics, SES, 2005-2013. |
|------------|--|

Funds, Grants and Prizes

- | | |
|--------|---|
| Prize | <ul style="list-style-type: none">• Latsis International Prize in 1995 for Ph. D. dissertation |
| Grants | <ul style="list-style-type: none">• Swiss National Fund (SNF) “jeunes chercheurs” at the LSE in 1991-1992• “Poste de la relève” at the FPSE in 1997-2000• SNF “professeur boursier” at the FPSE and the department of econometrics in 2000-2005. |
| Funds | <ul style="list-style-type: none">• <i>International comparative study of data truncation</i>, LSE reasearch initiative fund; with prof. F. Cowell, in 1994-1995.• <i>Distributional analysis using sample data</i>, Economic and Social Research Council (ESRC); with prof. F. Cowell in 1995-1997.• <i>Modelling upper incomes</i>, STICERD research fund; with prof. F. Cowell in 1996-1997.• <i>Statistical techniques for personal income distribution</i>, SNF; with prof. E. Ronchetti in 1997.• <i>Generalized Linear Latent Variable and Mixed Models: Estimation, Inference and Analysis of Data in the Social Sciences</i>, SNF; in 2005-2008, extended until 2012.• <i>Generalized Linear Latent Variable for the analysis of financial data</i>, NCCR Finrisk, SNF; in 2006-2008. |

Funds, Grants and Prizes (continued)

- *Robust Prediction and Model Choice in Mixed Linear Models for the Analysis of Social Sciences Data*, SNF; in 2011-2014.
- *Modelling of Reciprocal Influences of Neuronal Activity Between Brain Regions Involved in Emotional Processing*, CADMOS, University of Geneva, in 2010-2013.
- *Robust Estimation of Time Dependent Processes with Application to Brain Imaging Data*, SNF; in 2012-2015.

Ph.D. thesis supervision

- **Cesare Miglioli.**
Stepwise Generalized Linear Model Building in High Dimension. Ongoing
- **Guillaume Blanc.**
Fast Simulation based Inference for Generalized Linear Latent Variable Models. Ongoing
- **Orso, Samuel.**
Bounded-Influence Robust Estimation of Copulas. Ongoing
- **Xu, Haotian.**
A Wavelet-Based Goodness-of-Fit Assessment for Latent Variable Models. Ongoing
- **Molinari, Roberto Carlo** (July 2016)
Robust Inference for Random Fields and Latent Models,
University of Geneva, GSEM, Ph. D. Thesis no 32.
- **Dupuis Lozeron, Elise** (August 2015)
Simulation Based Bias Correction Methods for Complex Problems,
University of Geneva, GSEM, Ph. D. Thesis no 17.
- **Guerrier, Stéphane**(September 2013)
Two Essays in Statistics: a Prediction Divergence Criterion for Model Selection & Wavelet Variance Based Estimation of Latent Time Series Models,
University of Geneva, SES, Ph. D. Thesis no 814.
- **Couturier, Dominique-Laurent** (August 2011)
Statistical Modelling of Radio Audience Data: a Parametric Approach,
University of Geneva, SES, Ph. D. Thesis no 762.
- **Elefant-Yanni, Véronique Rica** (March 2009)
Research on Affect Structure Using Generalized Linear Latent Variable Models for the Treatment of Ordinal Variables,
University of Geneva, FPSE, Ph. D. Thesis no 418.
- **Conne, David** (October 2008)
Goodness-of-Fit for Generalized Linear Latent Variables Models,
University of Geneva, SES, Ph. D. Thesis no 681.
- **Huber, Philippe** (July 2004)
Generalized Linear Latent Variables Models: Estimation, Inference and Empirical Analysis of Financial Data,
University of Geneva, SES, Ph. D. Thesis no 564.
- **Copt, Samuel** (June 2004)
High Breakdown Inference for Mixed Linear Models,
University of Geneva, SES, Ph. D. Thesis no 563.

Publications

- Submitted
- Guerrier, S., Orso, S. and M.-P. Victoria-Feser (2018). “Parametric Inference for Index Functionals”, Revise and Resubmit.
- Articles
- Guerrier, S., Dupuis, E., Ma, Y. and M.-P. Victoria-Feser (2018). “Simulation based Bias Correction Methods for Complex Models”, *Journal of the American Statistical Association (Theory & Methods)*, to appear. Online version: <https://doi.org/10.1080/01621459.2017.1380031>.
 - Heritier, S. and M.-P. Victoria-Feser (2017). “Discussion of *The power of monitoring: How to make the most of a contaminated multivariate sample* by A. Cerioli, M. Riani, A. C. Atkinson and A. Corbellini”, *Statistical Methods & Applications*, to appear.
 - Guerrier, S., Molinari, R. and M.-P. Victoria-Feser (2014). Estimation of Time Series Models via Robust Wavelet Variance. *Austrian Journal of Statistics*, 43 (3-4), 267–277.
 - Stebler, Y., Guerrier, S., Skaloud, J. and M.-P. Victoria-Feser (2014). Generalized Method of Wavelet Moments for Inertial Navigation Filter Design. *IEEE Transactions on Aerospace and Electronic Systems*, 50 (2), 2269–2283.
 - Dupuis, D. J. and M.-P. Victoria-Feser (2013). Robust VIF Regression with Application to Variable Selection in Large Datasets. *Annals of Applied Statistics*, 7, 319–341.
 - Guerrier, S., Skaloud, J., Stebler, Y. and M.-P. Victoria-Feser (2013). Wavelet-Variance-Based Estimation for Composite Stochastic Processes. *Journal of the American Statistical Association (Theory & Methods)*, 108 (503), 1021–1030.
 - Guerrier, S., Waegli, A., Skaloud, J. and M.-P. Victoria-Feser (2012). Fault Detection and Isolation in Multiple MEMS-IMUs Configurations. *IEEE Transactions on Aerospace and Electronic Systems*, 48 (July), 2015–2031.
 - Stebler, Y., Guerrier, S., Skaloud, J. and Victoria-Feser, M.-P. (2011). “Constrained Expectation-Maximization Algorithm for Stochastic Inertial Error Modeling: Study of Feasibility”. *Measurement Science and Technology*, 22.
 - Sardy, S. and M.-P. Victoria-Feser (2011). “Isotone Additive Latent Variable Models”. *Statistics and Computing*, 22, 647–659.
 - Dupuis, D. J. and M.-P. Victoria-Feser (2011). “Fast Robust Model Selection in Large Datasets”. *Journal of the American Statistical Association (Theory & Methods)*, 106, 203–212.
 - Conne, D., Ronchetti, E. and Victoria-Feser, M.-P. (2010). “Goodness-of-fit for Generalized Linear Latent Variables Models”. *Journal of the American Statistical Association (Theory & Methods)*, 105, 1126–1134.
 - Couturier, D.-L. and Victoria-Feser, M.-P. (2010). “Zero-Inflated Truncated Generalized Pareto Distribution for the Analysis of Radio Audience Data”. *Annals of Applied Statistics*, 4, 1824–1846.

Publications (continued)

- Renaud, O. and M.-P. Victoria-Feser, (2010). “A Robust Coefficient Of Determination For Regression”. *Journal of Statistical Planning and Inference*, 140, 1852–1862.
- Dupuis Lozeron, E. and M.-P. Victoria-Feser (2010). “Robust Estimation of Constrained Covariance Matrices for Confirmatory Factor Analysis”. *Computational Statistics and Data Analysis*, 54, 3020–3032.
- Huber, P., O. Scaillet and M.-P. Victoria-Feser (2009). “Assessing Multivariate Predictors Of Financial Market Movements: A Latent Factor Framework For Ordinal Data”. *Annals of Applied Statistics*, **3**, 249–271.
- Victoria-Feser, M.-P. (2007). “De-Biasing Weighted MLE via Indirect Inference: The Case of Generalized Linear Latent Variable Models”. *Revstat Statistical Journal*, **5**, 85–96.
- Cowell, F. A. and M.-P. Victoria-Feser (2007). “Robust Stochastic Dominance: A Semi-Parametric Approach”. *Journal of Economic Inequality*, **7**, 21–37.
- Dupuis, D. and M.-P. Victoria-Feser (2006). “A Robust Prediction Error Criterion for Pareto Modeling of Upper Tails”. *The Canadian Journal of Statistics*, **34**, 639–658.
- Cowell, F. A. and M.-P. Victoria-Feser (2006). “Distributional Dominance with Trimmed Data”. *Journal of Business and Economics Statistics*, **24**, 291–300.
- Moustaki, I. and M.-P. Victoria-Feser (2006). “Bounded-Influence Robust Estimation in Generalized Linear Latent Variable Models” . *Journal of the American Statistical Association (Theory & Methods)*, **101**, 644–653.
- Copt, S. and Victoria-Feser, M.-P. (2006). “High Breakdown Inference in the Mixed Linear Model” . *Journal of the American Statistical Association (Theory & Methods)*, **101**, 292–300.
- Huber, P., E. Ronchetti and M.-P. Victoria-Feser (2004). “Estimation of Generalized Latent Trait Models”. *Journal of the Royal Statistical Society Series B*, **66**, 893–908.
- Cowell, F. and M.-P. Victoria-Feser (2003). Distribution-Free Inference for Welfare Indices under Complete and Incomplete Information. *The Journal of Economic Inequality*, 1 (3), 191–219.
- Cheng, T.-C. and M.-P. Victoria-Feser (2002). High Breakdown Estimation of Multivariate Location and Scale With Missing Observations. *British Journal of Mathematical and Statistical Psychology*, 55 (2), 317–335.
- Victoria-Feser, M.-P. (2002). Robust Inference with Binary Data. *Psychometrika*, 67 (1), 21–32.
- Cowell, F. and M.-P. Victoria-Feser (2002). Welfare Rankings in the Presence of Contaminated Data. *Econometrica*, 70 (3), 1221–1233.

Publications (continued)

- Ayadi, M., Matoussi, M. S. and M.-P. Victoria-Feser (2001). Putting Robust Statistical Methods into Practice: Poverty Analysis in Tunisia. *Swiss Journal of Economics and Statistics*, 3 (14), 463–482.
- Victoria-Feser, M.-P. (2000). A General Robust Approach to the Analysis of Income Distribution, Inequality and Poverty. *International Statistical Review*, 68, 277–293.
- Victoria-Feser, M.-P. (1997). A Robust Test for Non-nested Hypotheses. *Journal of the Royal Statistical Society. B, Statistical Methodology*, 59 (3), 715–727.
- Victoria-Feser, M.-P. and E. Ronchetti (1997). Robust Estimation for Grouped Data. *Journal of the American Statistical Association (Theory & Methods)*, 92 (437), 333–340.
- Cowell, F. and M.-P. Victoria-Feser (1996). Poverty measurement with contaminated data: A robust approach. *European Economic Review*, 40 (9), 1761–1771.
- Cowell, F. and M.-P. Victoria-Feser (1996). Robustness Properties of Inequality Measures. *Econometrica*, 64, 77–101.
- Victoria-Feser, M.-P. and E. Ronchetti (1994). Robust Methods for Personal-Income Distribution Models. *Canadian Journal of Statistics*, 22 (2), 247–258.

Books

- Heritier, S., E. Cantoni, S. Copt and M.-P. Victoria-Feser (2009). *Robust Methods in Biostatistics*. Wiley Series in Probability and Statistics.

Book chapters

- Cowell, F. A. and M.-P. Victoria-Feser (2008). “Modelling Lorenz Curves: Robust and Semi-Parametric Issues”. In *Modelling Income Distributions and Lorenz Curves*, D. Chotikapanich (ed). Springer.
- Victoria-Feser, M.-P. (2005) “Robust Statistics for Multivariate Models”. In *Encyclopedia of Statistics in Behavioral Science*, Everitt, B. and Howell, D. (eds), 1764–1768. Chichester: Wiley.
- Copt, S. and Victoria-Feser, M.-P. (2004). “Fast algorithms for computing high breakdown covariance matrices with missing data”. In *Theory and Applications of Recent Robust Methods*, Hubert, M., Pison, G., Struyf, A. and Van Aelst, S. (eds), 71–82. Basel: Birkhauser, Statistics for Industry and Technology Series.
- Cowell, F. and M.-P. Victoria-Feser (2000). Distributional Analysis: a Robust Approach. In *Putting Economics To Work*, Atkinson, T., Glennerster, H. and Stern, N. (eds). STICERD, London School of Economics.
- Victoria-Feser, M.-P. (1999). Comment on Giorgi’s chapter: The Sampling Properties of Inequality Indices. In *Handbook on Income Inequality Measurement*, J. Silber (ed), 260–267. Kluwer Academic Publisher.
- Ronchetti, E. and M.-P. Victoria-Feser (1997). Resistant Modelling of Income Distributions and Inequality Measures. In *The Practice of Data Analysis: Essays in Honor of John W. Tukey*, D. R. Brillinger, L. T. Fernholz and S. Morgenthaler (eds), 287–298. Princeton: Princeton University Press.

Publications (continued)

- Heritier, S. and M.-P. Victoria-Feser (1997). “Practical applications of bounded-influence tests”. In *Handbook of Statistics 15*, G.S. Maddala and C.R. Rao (eds), 77–100. Elsevier.
- Victoria-Feser, M.-P. (1995). Robust Methods for Personal Income Distribution Models, with Application to Dagum’s Model. In *Research On Economic Inequality: Income Distribution, Social Welfare, Inequality and Poverty*, C. Dagum and A. Lemmi (eds), 225–239. Greenwich: JAI Press.
- Conference Proceedings • Stebler, Y., Guerrier, S., Skaloud, J., Molinari, R. and M.-P. Victoria-Feser (2014). Study of MEMS-based Inertial Sensors Operating in Dynamic Conditions”. In *Proceedings of IEEE/ION PLANS 2014*. Monterey, CA, USA.
- Guerrier, S., Molinari, R., Skalud, J. and M.-P. Victoria-Feser (2013). “An Algorithm for Automatic Inertial Sensors Calibration”. In *Proceedings of the ION GNSS 2013*. Nashville.
- Stebler, Y., Guerrier, S., Skalud, J. and M.-P. Victoria-Feser (2012). “A Framework for Inertial Sensor Calibration using Complex Stochastic Error Models”. In *Proceedings of the Position Location and Navigation Symposium (PLANS), 2012 IEEE/ION*.
- Dupuis-Lozeron, E. and M.-P. Victoria-Feser (2012). “Simulation Based Estimation for Generalized Latent Linear Variables Models”. In *Quaderni di Statistica*, 14, 93–96, proceedings of the International Conference on Methods and Models for Latent Variables (MMLV012), May 2012, Naples, Italy.
- Stebler, Y., Guerrier, S., Skalud, J. and M.-P. Victoria-Feser (2011). “Improving Modeling of MEMS-IMUs Operating in GNSS-denied Conditions”. In *Proceedings of the ION GNSS 2011*. Portland, OR, USA.