

# Samuel Orso

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Born: March 12, 1987—Geneva, Switzerland  
Nationality: Swiss

## Current position

*Postdoctoral Scholar*, Geneva School of Economics and Management, University of Geneva  
*Lecturer*, Faculty of Business and Management, University of Lausanne

## Areas of specialization

Robust statistics • Simulation-based methods

## Appointments held

2013-2019 *Research Assistant*, University of Geneva  
2016-2017 *Lecturer*, University of Applied Sciences and Arts, Western Switzerland  
2013 *Pollster*, Swiss Federal Statistical Office, Neuchâtel

## Education

2019 PhD in Statistics, University of Geneva  
2013 MSc in Statistics, University of Geneva

## Grants & awards

2019 Financial support for conference, Fondation Ernst et Lucie Schmidheiny - 1,000 CHF  
2019 SNFS Flexibility Grant - 33,670 CHF  
2019 Financial support for conference, Société Académique de Genève - 864 CHF  
2016 Financial support for conference, Académie suisse des sciences humaines et sociales - 500 CHF  
2013 Best Grade & Best Master Thesis, Pictet Group Charitable Foundation - 4,000 CHF

## Publications

### THESIS

- 2019 Orso, Samuel (2019), “Contributions to simulation-based estimation methods,” *Doctoral dissertation*. University of Geneva, Switzerland.  
[doi: 10.13097/archive-ouverte/unige:121536](https://doi.org/10.13097/archive-ouverte/unige:121536)
- 2013 Orso, Samuel (2013), “Robust Estimation for Bivariate Distribution,” *Master’s thesis*. University of Geneva, Switzerland.  
<https://archive-ouverte.unige.ch/unige:33672>

### JOURNAL ARTICLES & PROCEEDINGS

- 2020 Guerrier, Stéphane, Jurado, Juan, Khaghani, Mehran, Bakalli, Gaetan, Karemera, Mucyo, Molinari, Roberto, Orso, Samuel, Raquet, John, Schubert, Christine, Skaloud, Jan, Xu, Haotian, Zhang, Yuming (2020), “Wavelet-Based Moment-Matching Techniques for Inertial Sensor Calibration,” *IEEE Transactions on Instrumentation and Measurement*.  
[doi: 10.1109/TIM.2020.2984820](https://doi.org/10.1109/TIM.2020.2984820) Impact factor: 3.89
- 2018 Clausen, Philippe, Skaloud, Jan, Orso, Samuel, and Guerrier, Stéphane (2018), “Construction of dynamically-dependent stochastic error models,” *IEEE/ION Position, Location and Navigation Symposium (PLANS)*, Monterey, CA, 2018, pp. 1336-1341.  
[doi: 10.1109/PLANS.2018.8373524](https://doi.org/10.1109/PLANS.2018.8373524)
- 2018 Branca, Mattia, Orso, Samuel, Molinari, Roberto C, Xu, Haotian, Guerrier, Stéphane, Zhang, Yuming, Mili, Nabil (2018), “Is nonmetastatic cutaneous melanoma predictable through genomic biomarkers?,” *Melanoma research* 28(1) 21-29.  
[doi: 10.1097/CMR.0000000000000412](https://doi.org/10.1097/CMR.0000000000000412) Impact factor: 2.615
- 2018 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2018), “Parametric inference for index functionals,” *Econometrics* 6(2) 22.  
[doi: 10.3390/econometrics6020022](https://doi.org/10.3390/econometrics6020022)
- 2016 Guerrier, Stéphane, Mili, Nabil, Molinari, Roberto, Orso, Samuel, Avella-Medina, Marco, Ma, Yanyuan (2016), “A predictive based regression algorithm for gene network selection,” *Frontiers in Genetics* 7 97.  
[doi: 10.3389/fgene.2016.00097](https://doi.org/10.3389/fgene.2016.00097) Impact factor: 3.517

### WORKING PAPERS

- 2020 Roberto Molinari, Gaetan Bakalli, Stéphane Guerrier, Cesare Miglioli, Samuel Orso, Olivier Scaillet (2020), “SWAG: A Wrapper Method for Sparse Learning,” *Swiss Finance Institute Research Paper*.  
[arXiv:2006.12837](https://arxiv.org/abs/2006.12837)
- 2019 Guerrier, Stéphane, Karemera, Mucyo, Orso, Samuel, Victoria-Feser, Maria-Pia (2019), “Phase Transition Unbiased Estimation in High Dimensional Settings,” *Working paper*.  
[arXiv:1907.11541](https://arxiv.org/abs/1907.11541)
- 2019 Guerrier, Stéphane, Karemera, Mucyo, Orso, Samuel, Victoria-Feser, Maria-Pia (2019), “A simple recipe for making accurate parametric inference in finite sample,” *Working paper*.  
[arXiv:1901.06750](https://arxiv.org/abs/1901.06750)
- 2013 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2019), “Robust Estimation of Bivariate Copulas,” *Working paper*.  
[unige:30307](https://unige.ch/unige/30307)

## Talks

### CONFERENCES

- 2019 Guerrier, Stéphane, Karamera, Mucyo, Orso, Samuel, Victoria-Feser, Maria-Pia (2019, December), “Simulated switched Z-estimation for accurate finite sample inference,” *12th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics)*, London, UK.
- 2019 Guerrier, Stéphane, Karamera, Mucyo, Orso, Samuel, Victoria-Feser, Maria-Pia (2019, April), “A simple recipe for making accurate parametric inference in finite sample,” *Final CRoNoS meeting and Workshop on Multivariate Data Analysis (CRoNoS MDA 2019)*, Limassol, Cyprus.
- 2016 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2016, August), “Two-step robust estimation of copulae,” *22nd International Conference on Computational Statistics (COMPSTAT)*, Oviedo, Spain.
- 2014 Guerrier, Stéphane, Molinari, Roberto, Orso, Samuel, Victoria-Feser, Maria-Pia (2014, December), “Bounded-influence robust estimation of copulas,” *7th International Conference on ERCIM WG on Computational and Methodological Statistics (ERCIM 2014)*, Pisa, Italy.
- 2014 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2014, August), “Bounded-influence robust estimation of copulas,” *21st International Conference on Computational Statistics (COMPSTAT)*, Geneva, Switzerland.
- 2014 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2014, August), “Bounded-influence robust estimation of copulas,” *4th International Conference on Robust Statistics (ICORS)*, Haale, Germany.

### RESEARCH SEMINARS

- 2016 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2016, October), “Two-step feasible M-estimators for complex models,” *Research Seminar of the Institute of Transportation and Economics*, Technische Universität Dresden, Dresden, Germany.
- 2016 Guerrier, Stéphane, Mili, Nabil, Molinari, Roberto, Orso, Samuel, Avella-Medina, Marco, Ma, Yanyuan (2016, June), “A predictive based regression algorithm for gene network selection,” *Epidemiological symposium*, Hôpitaux Universitaires de Genève, Geneva, Switzerland.
- 2016 Clausen, Philippe, Skaloud, Jan, Orso, Samuel, and Guerrier, Stéphane (2016, June), “Inertial sensor stochastic calibration under varying environmental conditions,” *Environmental engineer talk*, EPFL, Lausanne, Switzerland.
- 2015 Guerrier, Stéphane, Orso, Samuel, Victoria-Feser, Maria-Pia (2015, February), “Robust inference for copula models,” *Economic Research Seminar*, Technische Universität Humboldt Universität zu Berlin, Berlin, Germany.

## Teaching

- 2018-present *Programming tools for data science*, MSc Management - Business Analytics, 6 ECTS, University of Lausanne.  
[Class' website](#)
- 2018 *Forecasting*, MSc Management - Business Analytics, 3 ECTS, University of Lausanne.  
[Class' website](#)
- 2017 *Multivariate statistics*, MBA, University of Applied Sciences and Arts, Western Switzerland, Lausanne.
- 2016 *Statistics 2*, BSc, University of Applied Sciences and Arts, Western Switzerland, Geneva.

## Service to the profession

- 2019-present Member of the Geneva School of Economics and Management's Participatory Council (faculty governance).
- 2016-2017 Treasurer for the Geneva Academics in Management and Economics (PhD association).

## Served as referee

Advances in Statistical Analysis  
Computational Statistics