

CATIA SCRICCILO

CV

Contact Information

UNIVERSITY OF VERONA	PHONE:	+39 (0)45 802.8341
DEPARTMENT OF ECONOMICS	FAX:	+39 (0)45 802.8529
VIA CANTARANE, 24	E-MAIL:	catia.scricciolo@univr.it
I-37129 VERONA, ITALY	WEBPAGE:	http://www.dse.univr.it/?ent=persona&id=33023&lang=en

Academic Positions

2015–	ASSOCIATE PROFESSOR OF STATISTICS, Dept. of Economics, Univ. of Verona (IT)
2007–2015	ASSISTANT PROFESSOR OF STATISTICS, Dept. of Decision Sciences, Bocconi Univ., Milan (IT)
2004–2007	RESEARCHER WITH GRANT IN STATISTICS, Inst. of Quantitative Methods, Bocconi Univ., Milan (IT)
2002–2004	POST DOCTORAL FELLOW IN STATISTICS, Dept. of Statistical Sciences, Univ. of Padua (IT)

Qualification

MAR 2017 ITALIAN NATIONAL QUALIFICATION FOR FULL PROFESSOR IN STATISTICS, “13/D1 STATISTICA”, VALIDITY 31/03/2017–31/03/2029.

Education

2002	PHD IN STATISTICS (<i>DOTTORATO DI RICERCA IN STATISTICA</i>), Dept. of Statistical Sciences, Univ. of Padua (IT).
1998	DEGREE IN STATISTICS (<i>LAUREA IN STATISTICA</i>), Faculty of Statistical Sciences, Univ. of Rome “La Sapienza” (IT).

Research Interests

Nonparametric function estimation
Mixture models
Large sample theory
Empirical Bayes procedures
Bayesian adaptation
Bayesian inverse problems

Working paper

Scricciolò, C. (2025). Adaptive minimax-optimal Wasserstein deconvolution with unknown error distributions. *Department of Economics (DSE), Univ. of Verona, WP Number: 7 July 2025, ISSN: 2036-2919 (paper), 2036-4679 (online). Submitted*

Articles in Refereed Journals

- **Scricciolo, C.** (2025). Minimax rates for Wasserstein deconvolution of regular distributions with ordinary smooth errors. *Statistical Methods & Applications*, **34**, 471–498. <https://doi.org/10.1007/s10260-025-00795-z>
- **Rousseau, J., Scricciolo, C.** (2024). Wasserstein convergence in Bayesian and frequentist deconvolution models. *The Annals of Statistics*, **52**(4), 1691–1715. <https://projecteuclid.org/journals/annals-of-statistics/volume-52/issue-4>
- **Scricciolo, C.** (2018). Bayes and maximum likelihood for L^1 -Wasserstein deconvolution of Laplace mixtures. *Statistical Methods & Applications*, **27**(2), 333–362. https://link.springer.com/article/10.1007/s10260-017-0400-4?wt_mc=alerts.TOCjournals&utm_source=toc&utm_medium=email&utm_content=10260&utm_campaign=#citeas
- **Donnet, S., Rivoirard, V., Rousseau, J., Scricciolo, C.** (2018). Posterior concentration rates for empirical Bayes procedures with applications to Dirichlet process mixtures. *Bernoulli*, **24**(1), 231–256. <http://projecteuclid.org/euclid.bj/1501142441>
- **Donnet, S., Rivoirard, V., Rousseau, J., Scricciolo, C.** (2017). Posterior concentration rates for counting processes with Aalen multiplicative intensities. *Bayesian Analysis*, **12**(1), 53–87. <https://projecteuclid.org/euclid.ba/1451333725>
- **Scricciolo, C.** (2015). Empirical Bayes conditional density estimation. *STATISTICA*, **LXXV**(1), 37–55. <http://rivista-statistica.unibo.it/article/view/5822/0>
- **Scricciolo, C.** (2015). Bayesian adaptation. *Journal of Statistical Planning and Inference*, **166**, 87–101. <http://authors.elsevier.com/a/1RcN11M25x-3Ky>
- **Petrone, S., Rizzelli, S., Rousseau, J., Scricciolo, C.** (2014). Empirical Bayes methods in classical and Bayesian inference. *METRON*, **72**(2), 201–215. <http://link.springer.com/article/10.1007/s40300-014-0044-1>
- **Scricciolo, C.** (2014). Adaptive Bayesian density estimation in L^p -metrics with Pitman-Yor or normalized inverse-Gaussian process kernel mixtures. *Bayesian Analysis*, **9**(2), 475–520. http://projecteuclid.org/download/pdfview_1/euclid.ba/1401148317
- **Petrone, S., Rousseau, J., Scricciolo, C.** (2014). Bayes and empirical Bayes: do they merge? *Biometrika*, **101**(2), 285–302. Supplementary material for “Bayes and empirical Bayes: do they merge?” *Biometrika*, 1–8. <http://biomet.oxfordjournals.org/content/early/2014/04/09/biomet.ast067.abstract>
- **Scricciolo, C.** (2011). Posterior rates of convergence for Dirichlet mixtures of exponential power densities. *Electronic Journal of Statistics*, **5**, 270–308. https://projecteuclid.org/download/pdfview_1/euclid.ejs/1303996031
- **Scricciolo, C.** (2008). A note on Bayesian nonparametric regression function estimation. *Statistical Methods & Applications*, **17**(3), 321–334. <http://link.springer.com/article/10.1007%2Fs10260-007-0064-6>
- **Scricciolo, C.** (2007). On rates of convergence for Bayesian density estimation. *Scandinavian Journal of Statistics*, **34**(3), 626–642. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9469.2006.00540.x/abstract>
- **Scricciolo, C.** (2006). Convergence rates for Bayesian density estimation of infinite-dimensional exponential families. *The Annals of Statistics*, **34**(6), 2897–2920. https://projecteuclid.org/download/pdfview_1/euclid.aos/1179935069
- **Scricciolo, C.** (1999). Probability matching priors: a review. *Journal of the Italian Statistical Society*, **8**(1), 83–100. <http://link.springer.com/article/10.1007%2F03178943>

Book Chapters

- **Scricciolo, C.** (2025+). Bayesian nonparametric mixing distribution estimation in the Gaussian-smoothed 1-Wasserstein distance. To appear in the series “*Springer Proceedings in Mathematics & Statistics*”.
- **Scricciolo, C.** (2022). Bayesian quantile estimation in deconvolution. In: Nicola Salvati, Cira Perna, Stefano Marchetti, Raymond Chambers (Editors), *Studies in Theoretical and Applied Statistics, SIS 2021, Pisa, Italy, June 21–25, Springer Proceedings in Mathematics & Statistics, vol. 406*. Springer Cham, pp. 135–150. <https://doi.org/10.1007/978-3-031-16609-9>
- **Scricciolo, C.** (2019). Bayesian Kantorovich Deconvolution in Finite Mixture Models. In: Petrucci A., Racioppi F., Verde R. (eds) *New Statistical Developments in Data Science. SIS 2017. Springer Proceedings in Mathematics & Statistics, vol 288*. Springer, Cham, pp. 119–134. https://doi.org/10.1007/978-3-030-21158-5_10
- **Scricciolo, C.** (2016). Rates for Bayesian Estimation of Location-Scale Mixtures of Super-Smooth

Densities. In: Alleva G., Giommi A. (eds) Topics in Theoretical and Applied Statistics. Studies in Theoretical and Applied Statistics. Springer, Cham, pp. 49-57. https://doi.org/10.1007/978-3-319-27274-0_5

- Rousseau, J., Salomond, J.-B., **Scricciolo, C.** (2014). On some aspects of the asymptotic properties of Bayesian approaches in nonparametric and semiparametric models. *ESAIM: Proc.* **01/2014**, **44**, *Journées MAS 2012*, 159–171. <http://www.esaim-proc.org/articles/proc/pdf/2014/01/proc144410.pdf>

Voices in International Encyclopedia of Statistical Science (IESS), Second Edition

- **Scricciolo, C.** (2025). Bayesian Adaptation. In *International Encyclopedia of Statistical Science*, Second Edition, Lovric M. (Editor), Springer Berlin, Heidelberg, pp. 165–168. ISBN 978-3-662-69358-2 <https://link.springer.com/referencework/10.1007/978-3-642-04898-2?page=2#overview>
- **Scricciolo, C.** (2025). Empirical Bayes. In *International Encyclopedia of Statistical Science*, Second Edition, Lovric M. (Editor), Springer Berlin, Heidelberg, pp. 798–801. ISBN 978-3-662-69358-2 <https://link.springer.com/referencework/10.1007/978-3-642-04898-2?page=2#overview>

Refereed Publications in Conference Proceedings

- **Scricciolo, C.** (2025). Minimax rates of convergence for multivariate deconvolution in the L^1 -distance with ordinary smooth errors. *Proceedings of the 7th International Conference on Statistics: Theory and Applications (ICSTA'25), Paris, France - August, 2025, Paper No. 159*. DOI: 10.11159/icsta25.159.
- **Scricciolo, C.** (2025). Wasserstein deconvolution with unknown error distribution. In *Statistics for Innovation IV. SIS 2025, Short Papers, Contributed Sessions 3. Conference Proceedings SIS 2025*. Editors: E. di Bella, V. Gioia, C. Lagazio, S. Zaccarin, Springer, pp. 331–337. ISBN 978-3-031-96032-1.
- **Scricciolo, C.** (2024). Minimax rates for Wasserstein deconvolution of regular distributions with known ordinary smooth errors. In *Methodological and Applied Statistics and Demography IV. SIS 2024, Short Papers, Contributed Sessions 2*. Editors: Pollice A., Mariani P., Springer, pp. 528–533. ISBN 978-3-031-64446-7.
- **Scricciolo, C.** (2023). Bayesian mixing distribution estimation in the Gaussian-smoothed 1-Wasserstein distance. In: *Book of Short Papers-SIS 2023 - Statistical Learning, Sustainability and Impact Evaluation, Ancona (Italy), June 21, 2023 – June 23, 2023*. Pearson, pp. 282-286. ISBN 9788891935618.
- **Scricciolo, C.** (2021). Bayesian quantile estimation in deconvolution. In: *Book of Short Papers-SIS 2021, Pisa, 21–25 giugno 2021*. Pearson, pp. 1032-1036. ISBN 9788891927361.
- **Scricciolo, C.** (2020). Empirical Bayes estimation for mixture models. In: *Book of Short Papers-SIS 2020, Pearson*, pp. 667-672. ISBN 9788891910776.
- **Scricciolo, C.** (2017). Asymptotically efficient estimation in measurement error models. In: *SIS 2017. Statistics and Data Science: new challenges, new generations: 28-30 June 2017 Florence (Italy): proceedings of the Conference of the Italian Statistical Society / edited by Alessandra Petrucci, Rosanna Verde – Firenze: Firenze University Press, 2017. (Proceedings e report; 114)*, pp. 913-918. ISBN 978-88-6453-521-0.
- **Scricciolo, C.** (2016). On Deconvolution of Dirichlet-Laplace Mixtures. In: *Proceedings of the 48th Scientific Meeting of the Italian Statistical Society, Atti di “SIS2016”, Università degli Studi di Salerno, June 8th–June 10th, 2016*, pp. 1-6. ISBN 9788861970618
- Donnet, S., Rivoirard, V., Rousseau, J., **Scricciolo, C.** (2014). On convergence rates of empirical Bayes procedures. Paper available at <http://www.sis2014.it/proceedings/allpapers/2918.pdf>
47th Scientific Meeting of the Italian Statistical Society, Cagliari, June 11–13, 2014, Proceedings, Editors: S. Cabras, T. Di Battista and W. Racugno. ISBN: 978-88-8467-874-4. © 2014 CUEC Cooperativa Universitaria Editrice Cagliariitana.
- **Scricciolo, C.** (2012). Rates for Bayesian estimation of location-scale mixtures of super-smooth densities. *Proceedings of the XLVI Scientific Meeting of the Italian Statistical Society*, Rome, 20–22 June 2012. Paper available at <http://meetings.sis-statistica.org/index.php/sm/sm2012/paper/viewFile/2230/110>
ISBN 9788861298828.
Extended version accepted for publication in the Springer Volume of the 46th Scientific Meeting of the Italian Statistical Society, Rome, 20–22 June 2012. Springer Volume of the International Series “Studies in Theoretical and Applied Statistics”.
- **Scricciolo, C.** (2007). A note on Bayesian density estimation. *Proceedings of the Intermediate*

Scientific Meeting of the Italian Statistical Society—Risk and Prediction, Venice, 6–8 June 2007, pp. 579–580. Cleup-Padova. ISBN 9788861290938.

- Scricciolo, C. (2006). On Bayesian adaptive regression function estimation. *Proceedings of the XLIII Scientific Meeting of the Italian Statistical Society, Turin, 14–16 June 2006*, pp. 47–50, Cleup-Padova, ISBN 8871787919.
- Scricciolo, C. (2004). Asymptotic issues for Bayesian histograms. *Proceedings of the XLII Scientific Meeting of the Italian Statistical Society, Bari, 9–11 June 2004*, pp. 405–408. Cleup-Padova, ISBN 8871780345.

Non-refereed Publications in Conference Proceedings

- Scricciolo, C. (2009). Rates of convergence for Bayes estimators of mixtures of exponential power densities. In *S.Co.2009 Sixth Conference, Proceedings, Milan, 14–16 September 2009*, pp. 399–404. Maggioli Editore, ISBN 8838743851.
- Scricciolo, C. (2007). On a sub-optimality conjecture. In *S.Co.2007 Fifth Conference, Book of short papers, Venice, 6–8 September 2007*, pp. 457–462. Cleup-Padova, ISBN 9788861291140.
- Scricciolo, C. (2005). On Bayesian nonparametric regression function estimation. In *S.Co.2005 Fourth Conference, Book of short papers, Brixen, Italy, 15–17 September 2005*, pp. 413–418. Cleup-Padova.

Other Academic Activities

EDITORIAL ACTIVITY

- 2021–2024 AE for *Bayesian Analysis* since 01/01/2021 till 31/12/2024
- 2016– AE for *Sankhya Series A, Math. Stat. and Prob.* since 01/01/2016.
- 2014– AE for *Statistics & Probability Letters* since 01/11/2014

REFEREEING ACTIVITY

ESAIM Probability & Statistics (2012); *The Annals of Statistics* (2010, 2011, 2012, 2013a, 2013b, 2014, 2015, 2016); *Bernoulli* (2005, 2015, 2017, 2021); *Electronic Journal of Statistics* (2008, 2010, 2012, 2013, 2014, 2016, 2018, 2020); *Journal of Statistical Planning and Inference* (2016); *Test* (2008); *Annales de l'Institut Henri Poincaré* (2009); *Annales de l'I.S.U.P.* (2003); *STATISTICA* (2015, 2017)

ORGANIZATIONAL ACTIVITIES

- Co-Organizer together with R. Argiento (Univ. Bergamo (IT)) of an Organized Invited Session (virtual session CO056: *Bayesian Nonparametric Mixture Modeling and Clustering*) at CMStatistics 2025, King's College London (UK), 13–15/12/2025.
- Organizer and Chair of an Organized Invited Session (virtual session CO069: *Advances in high/infinite-dimensional inference*) at CMStatistics 2024, King's College London (UK), 14–16/12/2024.
- Member of the Scientific and Organizing Committee with J. Rousseau (Univ. Paris-Dauphine, FR, & Univ. of Oxford, UK) and L. Frattarolo (Univ. Verona, IT) of a two-day Workshop on “Advances in High/Infinite-Dimensional Inference” (AHIDI2024), Univ. Verona (IT), 7-8/11/2024.
- Organizer and Chair of an Organized Invited Session (virtual session EO121: *Bayesian asymptotics*) at CMStatistics 2023, HTW Berlin, Univ. of Applied Sciences, Berlin (DE), 16–18/12/2023.
- Organizer of a one-day workshop on “Eco-Stat Asymptotics”, University Verona, 11th September 2023.
- Organizer and Chair of an Organized Invited Session (virtual session EO392: *Advances in non- and semi-parametric inference for complex data*) at CMStatistics 2022, King's College London, 17–19 December 2022.
- Organizer and Chair of an Organized Invited Session (virtual session EO796: *Machine learning and statistical inverse problems*) at CMStatistics 2021, London (IT), 18–20 December 2021.
- Organizer of a short course on “Model Selection” delivered by Prof. G. Claeskens, K.U. Leuven, BE, 19/05/2011, PhD Program in Statistics, Bocconi Univ., Milan, IT
- Organizer and Chair of the Specialized Session on “*Bayesian Nonparametrics*” at S.Co. 2011, Padua, IT, 19–21/09/2011

Public Engagement: Voices in International Encyclopedia of Statistical Science (IESS), 2nd Edition

- **Scricciolo, C.** (2025). Bayesian Adaptation. In *International Encyclopedia of Statistical Science*, Second Edition, M. Lovric (Editor), Springer Berlin, Heidelberg, pp. 165–168. ISBN 978-3-662-69358-2 <https://link.springer.com/referencework/10.1007/978-3-642-04898-2?page=2#overview>
- **Scricciolo, C.** (2025). Empirical Bayes. In *International Encyclopedia of Statistical Science*, Second Edition, M. Lovric (Editor), Springer Berlin, Heidelberg, pp. 798–801. ISBN 978-3-662-69358-2 <https://link.springer.com/referencework/10.1007/978-3-642-04898-2?page=2#overview>

Society Memberships

- 2004– *Società Italiana di Statistica (SIS)*.
- 2009– *International Society for Bayesian Analysis (ISBA)*.
- 2020– *Unione Matematica Italiana (UMI)*.
- 2020– *Gruppo Nazionale di Ricerca INdAM–GNAMPA*.

Verona, 1st September 2025

Catia Scricciolo