

JULIO MICHAEL STERN

IME-USP - Institute of Mathematics and
Statistics of the University of São Paulo.
URL: www.ime.usp.br/~jmstern

e-mail1: jsstern@ime.usp.br
e-mail2: jmstern@hotmail.com
Cel. phone: +55-11-97697-7889

PERSONAL DATA

DOCUMENTS: Born 22-12-58, São Paulo; RG 9.948.831 SSP-SP; CPF 064.930.668-67.
ORCID: 0000-0003-2720-3871; RESEARCHERID: C-1128-2013; LATTES ID: 9582404119292455.
BIBLIOMETRICS (Google Scholar 12/2023): Citations= 2168; h-index= 26; i10-index= 49.
MARIED: Marisa Bassi Stern, 24-11-1984; CHILDREN: Rafael Bassi Stern, 07-05-1985;
Ana Carolina Bassi Stern, 02-04-1987; Deborah Bassi Stern, 17-08-1990.

I - ACADEMIC DEGREES AND HABILITATIONS

FULL PROFESSOR, University of São Paulo, Applied Mathematics.	2010
HABILITATION (LIVRE DOCENTE), University of São Paulo, Computer Science.	2002
DOCTOR OF PHILOSOPHY, Cornell University, USA, Operations Research.	1991
MASTER OF ENGINEERING, Cornell University, USA, Operations Research.	1990
MASTER OF SCIENCE, University of São Paulo, Mathematical Physics.	1983
BACHELOR, University of São Paulo, Physics.	1981

II - ACADEMIC AND COMMUNITY POSITIONS (UP TO 2023)

HEAD OF DATA AND INFORMATION PROTECTION OFFICE - EPDI-USP.	since 2022
CHAIR 18 DA ABF - Brazilian Academy of Philosophy.	since 2019
RESEARCH COUNCIL OF ABJ - Brazilian Jurimetrics Association.	since 2017
HEAD OF RESEARCH COUNCIL, CPq, IME-USP.	2016-2020
PRESIDENT, ISBrA - Brazilian chapter International Soc. for Bayesian Analysis.	2010-2012
RESEARCH FELLOW, CNPq - National Council for Science and Technology.	2003-2025
DIRECTOR, A Hebraica Club of São Paulo.	2003-2008
ASSISTENT, ASSOCIATE PROFESSOR, University of São Paulo.	1983-2002-2009

III - EDITED PROCEEDINGS FOR SCIENTIFIC EVENTS

▷ A.Polpo, F.Louzada, H.Takada, J.M.Stern (2018). MaxEnt'17 - Bayesian Inference and Maximum Entropy Methods in Science and Engineering. *Springer Proceedings in Mathematics and Statistics*, 239.
▷ A.Polpo, F.Louzada, L.L.R. Rifo, J.M.Stern, M.Lauretto, eds. (2015). Interdisciplinary Bayesian Statistics, EBEB 2014. *Springer Proceedings in Mathematics and Statistics*, 118.
▷ J.M.Stern, M.S.Lauretto, A.Polpo, M.A.Diniz (2012). EBEB-2012, XI Brazilian Meeting on Bayesian Statistics. *American Institute of Physics Conference Proceedings*, 1490.
▷ M.S.Lauretto, C.A.B.Pereira, J.M.Stern (2008). MaxEnt'08 - Bayesian Inference and Maximum Entropy Methods in Science and Engineering. *American Institute of Physics Conference Proceedings*, 1073.

IV - SELECTION OF PUBLISHED ARTICLES (TWO-PAGE RÉSUMÉ; ★, * = TOP 5 + 7)

• LOGIC, EPISTEMOLOGY AND PHILOSOPHY OF SCIENCE

★ J.M.Stern, C.A.B.Pereira, M.S.Lauretto, L.G.Esteves, R.Izbicki, R.B.Stern, M.A.Diniz (2024). The e-value and the Full Bayesian Significance Test: Logical Properties and Philosophical Consequences. <i>arXiv:2205.08010</i>	▷ J.M.Stern (2018). Verstehen (causal/ interpretative understanding), Erklären (law-governed description/ prediction), and Empirical Legal Studies. <i>JITE - J. of Institutional & Theoretical Economics</i> , 174, 1-10.
* J.M.Stern (2020). A Sharper Image: The Quest of Science and Recursive Production of Objective Realities. <i>Principia</i> , 24, 2, 255-297.	▷ J.M.Stern (2018). Karl Pearson and the Logic of Science: Renouncing Causal Understanding (the Bride) and Inverted Spinozism. <i>South Am. J. of Logic</i> , 4, 1, 219-252.
▷ J.M.Stern (2020). Jacob's Ladder: Logics of Magic, Metaphor and Metaphysics. <i>Sophia</i> , 59, 365-385.	▷ J.M.Stern, R.Izbicki, L.G.Esteves, R.B.Stern (2017). Logically-Consistent Hypothesis Testing and the Hexagon of Oppositions. <i>Log. J. IGPL</i> , 23, 5, 732-758.
▷ L.G.Esteves, R.Izbicki, R.B.Stern, J.M.Stern (2019). Pragmatic Hypotheses in the Evolution of Science. <i>Entropy</i> , 21, 883, 1-17.	* J.M.Stern (2017). Continuous Versions of Haack's Puzzles: Equilibria, Eigen-States and Ontologies.

Log. J. IGPL., 25, 4, 604-631.

▷ L.G.Esteves, R.Izbicki, J.M.Stern, R.B.Stern (2016). The Logical Consistency of Simultaneous Agnostic Hypothesis Tests. *Entropy* 18, 256, 1-32.

▷ J.M.Stern (2015). Cognitive-Constructivism, Quine, Dogmas of Empiricism, and Münchhausen's Trilemma. *Springer Proc. in Mathematics & Statistics*, 118, 55-68.

▷ J.M.Stern (2014). Jacob's Ladder & Scientific Ontologies. *Cybernetics & Human Knowing*, 21, 3, 9-43.

▷ J.M.Stern, C.A.B.Pereira (2014). Bayesian Epistemic Values: Focus on Surprise, Measure Probability. *Log. J. IGPL.*, 22, 2, 236-254.

▷ J.M.Stern (2011). Symmetry, Invariance and Ontology in Physics and Statistics. *Symmetry*, 3, 3, 611-635.

▷ J.M.Stern (2011). Constructive Verification, Empirical Induction, and Fallibilist Deduction: A Threefold Contrast. *Information*, 2, 635-650.

• STATISTICS, THEORY AND METHODS

★ C.A.B.Pereira; J.M.Stern (2020). The e-value: A Fully Bayesian Significance Measure for Precise Statistical Hypotheses and its Research Program. *Sao Paulo J. Math. Sci.* doi:10.1007/s40863-020-00171-7

▷ D.Marcondes, C.Peixoto, J.M.Stern (2019). Assessing Randomness in Case Assignment – Brazilian Supreme Court. *Law, Probability and Risk*, 18, 2-3, 97-114.

★ M.S.Lauretto, R.B.Stern, K.L.Morgan, M.H.Clark, J.M.Stern (2017). Haphazard Intentional Allocation and Rerandomization to Improve Covariate Balance in Experiments. *Am.Inst. Physics Conf.Proc.*, 1853, 0503, 1-8.

▷ V.Fossaluzza, M.S.Lauretto, C.A.B.Pereira, J.M.Stern (2015). Combining Optimization and Randomization Approaches for the Design of Clinical Trials. *Springer Proc. in Mathematics and Statistics*, 118, 173-184.

▷ M.S.Lauretto, F.Nakano, C.A.B.Pereira, J.M.Stern (2012). Intentional Sampling by Goal Optimization with Decoupling by Stochastic Perturbation. *Am.Inst. Physics Conf.Proc.*, 1490, 189-201.

▷ M.Diniz, C.A.B.Pereira, J.M.Stern (2012). Cointegration: Bayesian Significance Test. *Communications in Statistics - Theory & Methods*, 41, 19, 3562-3574.

* M.Diniz, C.A.B.Pereira, J.M.Stern (2011). Unit

▷ J.M.Stern (2008). Decoupling, Sparsity, Randomization, and Objective Bayesian Inference. *Cybernetics & Human Knowing*, 15, 2, 49-68.

▷ W.Borges, J.M.Stern (2007). The Rules of Logic Composition for the Bayesian Epistemic e-Values. *Log. J. IGPL.*, 15, 5-6, 401-420.

▷ J.M.Stern (2007). Language and Self-Reference Paradox. *Cybernetics & Human Knowing*, 14, 4, 71-92.

▷ J.M.Stern (2007). Cognitive Constructivism, Eigen-Solutions, and Sharp Statistical Hypotheses. *Cybernetics & Human Knowing*, 14, 1, 9-36.

▷ J.M.Stern (2004). Paraconsistent Sensitivity Analysis for Bayesian Significance Tests. *LNAI*, 3171, 134-143.

▷ J.M.Stern (2003). Significance Tests, Belief Calculi, and Burden of Proof in Legal and Scientific Discourse. *Frontiers in Artificial Intelligence and Applic.*, 101, 139-147.

Roots: Bayesian Significance Test. *Communications in Statistics - Theory & Methods*, 40, 23, 4200-4213.

★ C.A.B.Pereira, J.M.Stern, S.Wechsler (2008). Can a Significance Test be Genuinely Bayesian? *Bayesian Analysis*, 3, 79-100.

▷ C.A.B.Pereira, J.M.Stern (2008). Special Characterizations of Standard Discrete Models. *RevStat*, 6, 199-230.

▷ M.Lauretto, S.R.Faria, C.A.B.Pereira, J.M.Stern (2007). The Problem of Separate Hypotheses via Mixtures Models. *Am.Inst. Physics Conf.Proc.*, 954, 268-275.

* M.Lauretto, C.A.B.Pereira, J.M.Stern, S.Zacks (2003). Full Bayesian Significance Test Applied to Multivariate Normal Structure Models. *Brazilian Journal of Probability and Statistics*, 17, 147-168.

▷ M.R.Madruga, C.A.B.Pereira, J.M.Stern (2003). Bayesian Evidence Test for Precise Hypotheses. *Journal of Statistical Planning and Inference*, 117, 185-198.

▷ J.M.Stern, S.Zacks (2002). Testing the Independence of Poisson Variates under the Holgate Bivariate Distribution. *Stat. Probab. Lett.*, 60, 3, 1, 313-320.

★ C.A.B.Pereira, J.M.Stern (1999). Evidence and Credibility: Full Bayesian Significance Test for Precise Hypotheses. *Entropy*, 1, 69-80.

• SPARSE AND STRUCTURED SYSTEMS / NUMERICAL METHODS / OPERATIONS RESEARCH

▷ O.Saa, J.M.Stern (2019). Auditable Blockchain Randomization Tool. *Proceedings*, 33, 1, 17, 1-6.

▷ O.L.V.Costa, C.O.Ribeiro, E.E.Rego, J.M.Stern, V.Parente, S.Kileber (2017). Robust Portfolio Optimization for Electricity Planning: Brazilian Electricity Mix. *Energy Economics*, 64, 158-169.

* C.Humes, M.S.Lauretto, F.Nakano, C.A.B.Pereira, G.F.G.Rafare, J.M.Stern (2012). TORC3: Token-Ring Clearing Heuristic for Currency Circulation. AIP v.1490, pp.179-188. Patent INPI 04203-6 of 20/06/2023.

▷ R.Inhasz, J.M.Stern (2010). Emergent Semiotics in Genetic Programming and the Self-Adaptive Semantic Crossover. *Stud. in Computat. Intell.*, 314, 381-392.

* J.M.Stern, E.C.Colla (2009). Factorization of Sparse Bayesian Networks. *Stud. Computat. Intell.*, 199, 275-294.

▷ M.S.Lauretto, F.Nakano, C.A.B.Pereira, J.M.Stern (2009). Hierarchical Forecasting with Polynomial Nets. *Stud. Computat. Intell.*, 199, 305-315.

▷ M.S.Lauretto, F.Nakano, S.R.Faria, C.A.B.Pereira, J.M.Stern (2009). A Straightforward Multiallelic Significance Test for the Hardy-Weinberg Equilibrium Law. *Genetics and Molecular Biology*, 32, 619-625.

▷ P.J.Fernandes, J.M.Stern, M.S.Lauretto (2007). A New Media Optimizer Based on the Mean-Variance Model. *Pesquisa Operacional*, 27, 427-456.

▷ M.V.P.Garcia, C.Humes Jr, J.M.Stern (2003). Generalized Line Criterion for Gauss-Seidel Method. *Computational and Applied Mathematics*, 22, 91-97.

▷ M.S.Lauretto, F.Nakano, C.Ribeiro, J.M.Stern (1998). Real Attribute Learning Algorithm. *ISAS-SCI*, 2, 315-321

▷ J.M.Stern, S.A.Vavasis (1994). Active Set Methods for Problems in Column Block Angular Form. *Computational and Applied Mathematics*, 12, 199-226.

* J.M.Stern (1992). Simulated Annealing with a Temperature Dependent Penalty Function. *ORSA Journal on Computing*, 4, 311-319.