

SUMMARY OF THE CURRICULUM VITAE

Julio Michael Stern

1) Education/Training

Start/End	Duration (months)	Title	Institution	Work title
1977-1980	48	B.S. Physics	IF-USP - Institute of Physics of the University of São Paulo	
1981-1983	36	M.Sc. Mathematical Physics	IF-USP - Institute of Physics of the University of São Paulo	Geometric Aspects of General Relativity
1988-1989	24	M. Engineering	Cornell University	
1990-1991	24	Ph.D. Operations Research	Cornell University	Sparse Null Bases for Structured Optimization Problems
2003	--	Livre Docência (venia legendi)	IME-USP – Institute of Mathematics and Statistics of USP	Computational Methods of Operations research

2) Professional History.

IME-USP – Institute of Mathematics and Statistics of the University of Sao Paulo:

- 1983 – 2002 – 2009, Assistant, Associate Professor, (MS2, MS3, MS5)
- Since 2010, Full Professor, (MS6)

Complementary Activities:

- since 2022, Head of Office, EPDI-USP - Data and Information Protection Office.
- since 2019, Chair 18, ABF - Brazilian Academy of Philosophy.
- since 2017, Board member, ABJ - Brazilian Jurimetrics Association.
- 2016 – 2020, Head of Council, CPq-IME-USP, Research and Ethics Council.
- 2010 – 2012, President, ISBrA - Brazilian chapter Intern. Soc. Bayesian Analysis.
- 2006 – 2013, Juror exact sci. CBL - Brazilian Book Chamber, Jabuti prize.
- 2003 – 2008, Director, A Hebraica Club of São Paulo.
- 2003 – 2025, Research Fellow, CNPq - National Council for Science and Technology.

3) Most relevant scientific results (for technological projects, up to 5 items):

1) 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. arXiv:2205.08010

2) 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.*, 16, 566-584. doi:10.1007/s40863-020-00171-7

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

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

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

4) Research grants (most relevant, up to 5 items):

4a) Current research grants:

- 1) Research Productivity Scholarship, CNPq, PQ 303290/2021-8;
- 2) Main researcher (PP) at CEPID-CeMEAI, FAPESP 2013/07375-0;

4b) Completed research grants (as main organizer of scientific events)

- 1) MaxEnt 2017 - 37th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering, FAPESP 2017/06006-1
- 2) EBEB 2014 - XII Brazilian Meeting on Bayesian Statistics, FAPESP 2013/26398-0
- 3) EBEB 2012 - XI Brazilian Meeting on Bayesian Statistics, FAPESP 12/00095-9

5) Academic quantitative indicators:

1) <i>Books</i>	7
2) <i>Publications in journals with selective editorial policy</i>	75
3) <i>Book chapters</i>	17
4) <i>Supervised Master's dissertations</i>	
4 ^a) <i>Ongoing</i>	2
4 ^b) <i>Concluded</i>	14
5) <i>Supervised Doctoral theses</i>	8
6) <i>Postdoctoral supervisions</i>	1
7) <i>Citations:</i>	
<i>Publons</i>	581 (HI 14)
<i>Scopus</i>	652 (HI 13)
<i>Google Scholar</i>	2168 (HI 26)
8) <i>Registered software</i>	1
9) <i>Products developed and launched on the market</i>	1
10) <i>Optimized processes implemented in companies or social organizations</i>	5
11) <i>Created or supported companies</i>	2
12) <i>Relevant technical and scientific consultancy (referees for research agencies)</i>	100+

6) Links and Digital Identifiers:

Personal page (ULR) <https://www.ime.usp.br/~jmstern/>
ORCID: 0000-0003-2720-3871 <https://orcid.org/0000-0003-2720-3871>
ResearcherID: C-1128-2013 <https://www.webofscience.com/wos/author/record/924767>
Lattes ID: 9582404119292455 <http://buscatextual.cnpq.br/buscatextual/visualizacv.do>
Google Scholar: 7spXyx8AAAAJ <https://scholar.google.com/citations?user=7spXyx8AAAAJ&hl=en>

7) Other information (document limited to 4 pages):

7a) Patents:

1) Patent INPI 04203-6 granted on 20/06/2023. Based on the article: C.Humes, M.S.Laureto, F.Nakano, C.A.B.Pereira, G.F.G.Rafare, J.M.Stern (2012). TORC3: Token-Ring Clearing Heuristic for Currency Circulation. *Am. Inst. Physics Conf. Proc.*, 1490, 179-188.

7b) PITE and PIPE projects that have successfully developed software embedded technology:

1) FAPESP PITE 96/2341-2 -- High Performance Solver for Optimization Problems in Nested Block Angular Form. Developed for consulting partner *Unisoma* (Campinas) and final client *Sadia Alimentos*. Based on the article: J.M.Stern, S.A.Vavasis (1994). Active Set Methods for Problems in Column Block Angular Form. *Computational and Applied Mathematics*, 12, 199-226.

2) FAPESP PIPE 02/07887-6 -- Computational Analysis of Paternity Genetic Exam. Developed for the client Genomic Laboratory. Based on the article (among other works): M.S.Laureto, 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.

3) FAPESP PIPE 02/12864-5 -- Midia Portfolio Optimization via Mean-Variance Analysis. Developed for the client *IPSOS-Brazil*. Based on the article: P.J.Fernandes, J.M.Stern, M.S.Laureto (2007). A New Media Optimizer Based on the Mean-Variance Model. *Pesquisa Operacional*, 27, 427-456.

4) FAPESP PIPE 06/60831-0 -- Decision Support System for Optimized Management of Bovines. Developed in partnership with *ESALQ* (Piracicaba) researchers having as final clients medium-size farms.

5) FAPESP PIPE 06/156505-0 -- Actuarial Analysis via Branching Processes. Developed for consulting partner *UNISOMA* (Campinas) and the final client *Petros - Fundação Petrobras de Seguridade Social*. Based on the article: Carlos Alberto de Braganca Pereira; Fabio Nakano; Julio Michael Stern (2000). Actuarial Analysis via Branching Processes. *Annals of the 6th ISAS-SCI*, 8, 353-358.

7c) Organizer and proceedings editor of scientific events:

- 1) 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.
- 2) 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.
- 3) 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.
- 4) M.S.Lauretto, C.A.B.Pereira, J.M.Stern (2008). MaxEnt'08 - Bayesian Inference and Maximum Entropy Methods in Science and Engineering. *Am. Inst. Physics Conf. Proc.*, 1073.

7d) Selection of additional research articles developing original sampling and inference methods and corresponding computational implementations of direct interest for technological projects:

- 1) 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.
- 2) 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.
- 3) 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 Math. and Statistics*, 118, 173-184.
- 4) 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.
- 5) C.A.B.Pereira, J.M.Stern (2008). Special Characterizations of Standard Discrete Models. *REVSTAT-Statistical Journal*, 6, 199-230.
- 6) 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.
- 7) M.S.Lauretto, F.Nakano, C.A.B.Pereira, J.M.Stern (2009). Hierarchical Forecasting with Polynomial Nets. *Studies in Computational Intelligence*, 199, 305-315.
- 8) J.M.Stern, E.C.Colla (2009). Factorization of Sparse Bayesian Networks. *Studies in Computational Intelligence*, 199, 275-294.

7e) For a comprehensive view of my production, including over 100 publications, conference presentations, YouTube videos, software and computer programs, etc., see my www page at:

>>> <https://www.ime.usp.br/~jmstern/>

7f) Senior citizenship and health limitations:

1) In 2014, I suffered an acute myocardial infarct, with the subsequent placement of 3 stents to unblock large cardiac arteries. This heart disease and other problems characteristic of senior citizenship resulted in some adjustments in my pace of work and also in a preference for co-supervising students in partnership with younger professors already engaged in my research projects.