

#### EDUCATION

- PhD in Mathematics (1992). Universidad Central de Venezuela. Dissertation: “Near Ignorance Classes in Bayesian Analysis”. Supervisor: Luis Raúl Pericchi.
- MSc in Mathematics (1987). Universidad Simón Bolívar. Dissertation: “Analysis of Repeated Surveys Using Kalman Filters”.
- BSc in Mathematics (1985). Universidad Simón Bolívar.

#### EMPLOYMENT

- Professor (from 2018). Dept. of Statistics, University of California Santa Cruz.
- Professor (2008–2018). Dept. of Applied Mathematics and Statistics, University of California Santa Cruz. Department Chair (2009–2014). At UCSC since 2001.
- Full Professor (2000–2003). Dept. of Scientific Computing and Statistics, Universidad Simón Bolívar. At USB from 1987 to 2003.
- Adjunct Assistant Professor (1997-1998, Fall '96, Fall '95). ISDS, Duke University.
- Statistician, C.I.E.D.A. (1986-1987) (Centro de Investigaciones en Desarrollo y Ambiente), Caracas.
- Assistant Professor (1986-1987). Dept. of Mathematics, Universidad Metropolitana.

#### AWARDS AND FELLOWSHIPS

- Mitchell Prize 2020 for the best paper on the application of Bayesian methods. Paper (6).
- Fellow of the International Society for Bayesian Analysis, June 2016.
- Fellow of the American Statistical Association, August 2010.
- Mitchell Prize 2009 for the best paper on the application of Bayesian methods. Paper (31).
- Ordinary Member of the International Statistical Institute, elected in the year 2000.

- Annual Prize to the Best Scientific Paper in Engineering by Consejo Nacional de Investigaciones Científicas y Tecnológicas of Venezuela, year 2000. Paper (58).
- MSc in Mathematics with honors
- BSc in Mathematics Cum Laude

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

• Member of the International Society for Bayesian Analysis (ISBA); Treasurer (Jan '05 - Dec '07); Past Associate Editor of its Bulletin; Past member of the nominating and publications committees; Chair-elect (2014) and Chair (2015) of its Section on Environmental Sciences. • Member of the American Statistical Association, and chair of its advisory committee for climate change (2013-2015). • Member of the International Environmetrics Society (TIES), and member of its executive board (2013–2015). • Past member of the Board of the Latin-American Chapter of the Bernoulli Society .

#### REFEREED PUBLICATIONS

1. Robert Richardson, Athanasios Kottas and **Bruno Sansó** (2020) “Spatiotemporal modelling using integro-difference equations with bivariate stable kernels, to appear in *Journal of Royal Statistical Society, B*.
2. Daniel Kirsner and **Bruno Sansó** (2020) “Multi-scale shotgun stochastic search for large spatial datasets” , to appear in *Computational Statistics and Data Analysis*.
3. Sai Xiao, Athanasios Kottas, **Bruno Sansó** and Hyotae Kim (2019) “Nonparametric Bayesian Modeling and Estimation for Renewal Processes”. To appear in *Technometrics*.
4. Raquel Barata, Raquel Prado and **Bruno Sansó** (2019) “Comparison and assessment of large-scale surface temperature in climate model simulations”, *Advances in Statistical Climatology, Metereology and Oceanography*, 5, 67-85, <https://doi.org/10.5194/ascmo-5-67-2019>.
5. Rajarshi Gujaniyogui, **Bruno Sansó** (2020) “Large Multi-scale Spatial Modeling Using Tree Shrinkage Priors”, *Statistica Sinica*, 30, 2023–2050.
6. Devin Francom, **Bruno Sansó**, Vera Bulaevskaya, Donald Lucas, Matthew Simpson (2019) “Inferring Atmospheric Release Characteristics in a Large Computer Experiment using Bayesian Adaptive Splines”, to appear in *Journal of The American Statistical Association* DOI: 10.1080/01621459.2018.1562933.
7. Devin Francom, **Bruno Sansó**, (2018) “BASS: An R Package for Fitting and Performing Sensitivity Analysis of Bayesian Adaptive Spline Surfaces”. *Journal of Statistical Software*, 94, DOI:0.18637/jss.v094.i08.

8. Devin Francom, **Bruno Sansó**, Ana Kupresanin and Gardar Johannesson (2018) “Sensitivity Analysis and Emulation for Functional Data using Bayesian Adaptive Splines”. *Statistica Sinica* 28, 791–816, DOI: 10.5705/ss.202016.0130
9. Robert Richardson, Athanasios Kottas and **Bruno Sansó** (2018) “Bayesian Nonparametric Modeling For Integro-Difference Equations”. *Statistics and Computing*, 28, 1, pp 87101.
10. Robert Richardson, Athanasios Kottas and **Bruno Sansó** (2017) “Flexible Integro-Difference Equation Modeling for Spatio-Temporal Data”. *Computational Statistics and Data Analysis*, vol. 109, 182–198, <http://dx.doi.org/10.1016/j.csda.2016.11.011>.
11. Esther Salazar, Dorit Hammerling, Xia Wang, **Bruno Sansó**, Andrew O. Finley and Linda O. Mearns (2016) “Observation-based blended projections from ensembles of regional climate models”. *Climatic Change*, vol. 138(1), 55–69, doi:10.1007/s10584-016-1722-1.
12. Andrés Christen, **Bruno Sansó**, Mario Santana-Cibrian and Jorge X. Velasco-Hernández (2016) “Bayesian Deconvolution of oil Well Test Data Using Gaussian Processes”. *Journal of Applied Statistics*, vol. 43, 721–737, DOI:10.1080/02664763.2015.1077374
13. Sai Xiao, Athanasios Kottas and **Bruno Sansó** (2015) “Modeling for Seasonal Marked Point Processes: An Analysis of Evolving Hurricane Occurrences”. *Annals of Applied Statistics*, vol. 9, 353–382.
14. Waley W.J. Liang, Jacob B. Colvin, **Bruno Sansó** and Herbert K.H. Lee (2014) “Modeling and Anomalous Cluster Detection for Point Processes Using Process Convolutions”. *Journal of Computational Graphical Statistics*, vol. 23, 129–150, DOI:10.1080/10618600.2012.754303.
15. Tracy Holsclaw, **Bruno Sansó**, Herbert Lee, Katrin Heitmann, Salman Habib and David Higdon (2012) “Gaussian Process Modeling of Derivative Curves” *Technometrics*, vol. 55, 57–67, DOI:10.1080/00401706.2012.723918.
16. Francisco Beltrán, **Bruno Sansó**, Ricardo T. Lemos and Roy Mendelsohn (2012) “Joint Projections of North Pacific Sea Surface Temperature from Different Global Climate Models”. *Environmetrics*, vol. 23, 451–465, DOI: 10.1002/env.2150.
17. Aline Nobre, **Bruno Sansó** and Alexandra Schmidt (2011) “Spatially Varying Autoregressive Processes”. *Technometrics*, vol. 53, 310–321.
18. Tracy Holsclaw, Ujjaini Alam, **Bruno Sansó** Herbert Lee, Katrin Heitmann, Salman Habib and David Higdon (2011) “Nonparametric Reconstruction of the Dark Energy Equation of State from Diverse Data Sets”. *Physical Review D*, vol. 84, doi 083501.10.1103/PhysRevD.84.083501.
19. Esther Salazar, **Bruno Sansó** Andrew O. Finley, Dorit Hammerling, Ingelin Steinsland, Xia Wang and Paul Delamater (2011) “Comparing and Blending Regional Climate Model Predictions for the American Southwest”. *Journal of Agricultural, Biological and Environmental Statistics*, vol. 16, pp. 586–605, DOI: 10.1007/s13253-011-0074-6.

20. Ricardo Lemos and **Bruno Sansó** (2012) “Conditionally Linear Models for Non-Homogeneous Spatial Random Fields”, *Statistical Methodology*, vol. 9, pp. 275–284, doi: 10.1016/j.stamet.2011.02.001.
21. Andrés Christen and **Bruno Sansó** (2011) “Advances in the Sequential Design of Computer Experiments based on Active Learning”. *Communications in Statistics Theory and Methods*, vol. 40, pp. 4467–4483, DOI: 10.1080/03610920903518848.
22. Raquel Prado and **Bruno Sansó** (2011). “The 2004 Venezuelan presidential recall referendum: Discrepancies between two exit polls and official results”. *Statistical Science*, vol.26, pp. 517–527, doi: 10.1214/09-STS295.
23. Tracy Holsclaw, Ujjaini Alam, **Bruno Sansó** Herbert Lee, Katrin Heitmann, Salman Habib and David Higdon (2010) “Nonparametric dark energy reconstruction from supernova data” *Physical Review Letters*, vol. 105, 241302.
24. Tracy Holsclaw, Ujjaini Alam, **Bruno Sansó** Herbert Lee, Katrin Heitmann, Salman Habib and David Higdon (2010) “Nonparametric reconstruction of the dark energy equation of state”. *Physical Review D* vol. 82, 103502.
25. J.E. Cloern, K.A. Hieb, T. Jacobson, **B. Sansó**, E Di Lorenzo, M.T. Stacey, J.L. Largier, W. Meiring, W.T. Peterson, T.M. Powell, M. Winder, A.D. Jassby (2010) “Biological Communities in San Francisco Bay Track a North Pacific Climate Shift”. *Geophysical Research Letters*, vol. 37, L21602, doi:10.1029/2010GL044774.
26. Luigi Passarelli, **Bruno Sansó**, Laura Sandri and Warner Marzocchi (2010) “Testing forecasts of a new Bayesian time-predictable model of eruption occurrence”. *Journal of Volcanology and Geothermal Research*, vol. 198., pp. 57–75.
27. Ricardo Lemos, Bruno Sansó and F.D. Santos (2010) “Hierarchical Bayesian modeling of wind and sea surface temperature from the Portuguese coast”. *International Journal of Climatology*, 30, pp. 1423–1430. DOI: 10.1002/joc.1981.
28. Matthew Taddy, Herbert K. H. Lee and **Bruno Sansó** (2009) “Fast Bayesian Inference for Computer Simulation Inverse Problems”. *Inverse Problems* vol. 25, doi: 10.1088/0266-5611/25/8/085001.
29. **Bruno Sansó** and Chris Forest (2009). “Statistical Calibration of Climate System Properties”. *Applied Statistics*, vol. 58, pp. 485–503.
30. Aracelis Hernández, Lelys Guenni and **Bruno Sansó** (2009). “Extreme limit distribution of truncated models for daily rainfall”. *Environmetrics*, vol. 20, pp. 962–980, doi: 10.1002/env.967.
31. Ricardo T. Lemos and **Bruno Sansó** (2009) “A Spatio-Temporal Model for Mean, Anomaly and Trend Fields of North Atlantic Sea Surface Temperature (with discussion)”. *Journal of the American Statistical Association*, 104, pp. 5–25. DOI 10.1198/jasa.2009.0018. Selected as the annual Journal of American Statistical Association Application and Case Studies Special Invited Paper for presentation, with discussion, at the Joint Statistical Meeting, Washington, DC, 2009.

32. Claudia Tebaldi and **Bruno Sansó** (2009) “Joint Projections of Temperature and Precipitation Change from Multiple Climate Models: A Hierarchical Bayes Approach” *Journal of the Royal Statistical Society Series A*, vol. 172, pp. 83–106.
33. **Bruno Sansó**, Chris Forest and Daniel Zantedeschi (2008) “Inferring Climate System Properties Using a Computer Model”, with discussion. *Bayesian Analysis*, 03, pp 1–62. DOI:10.1214/08-BA301.
34. **Bruno Sansó**, Alexandra Schmidt and Aline Nobre (2008) “Spatio-Temporal Models Based on Discrete Convolutions”. *Canadian Journal of Statistics*, vol. 36, No 2, pp. 239–258.
35. Weining Zhou and **Bruno Sansó** (2008) Statistical Inference for Atmospheric Transport Models Using Process Convolutions. *Environmetrics*, vol. 19, pp 87–101.
36. Herbie Lee, **Bruno Sansó**, Weining Zhou and David Higdon (2007) “Inference for a Proton Accelerator Using Convolution Models”. *Journal of the American Statistical Association*, vol. 103, No 482, pp 604–613. DOI 10.1198/016214507000000833.
37. Kumar Viswanath, Katia Obraczka, Athanasios Kottas and **Bruno Sansó** (2007) “A Statistical Equivalent Models for Computer Simulators with and Application to the Random Waypoint Mobility Model”. *Simulation*, vol. 83, pp 157-172.
38. Ricardo T. Lemos, **Bruno Sansó** and Marc Los Huertos (2007). “Spatially Varying Temperature Trends in a Central California Estuary”. *Journal of Agricultural, Biological and Environmental Statistics*, vol. 12, No. 3, pp 379–396.
39. Mark A. Snyder, **Bruno Sansó** and Lisa C. Sloan (2007). “Validation of Climate Model Output using Bayesian Statistical Methods”. *Climatic Change*, vol 83, pp 457–476, 10.1007/s10584-007-9262-3.
40. Giselle Álvarez and **Bruno Sansó** (2007) Bayesian Wavelet Regression for Spatial Estimation. *Journal of Data Science*, vol 6, pp 219– 231.
41. Athanasios Kottas and **Bruno Sansó** (2007) “Bayesian Mixture Modeling for Spatial Poisson Process Intensities, with Applications to Extreme Value Analysis”. *Journal of Statistical Planning and Inference*, vol 137, pp 3151–3163.
42. Gabriel Huerta and **Bruno Sansó** (2007) “Time-Varying Models for Extreme Values”. *Environmental and Ecological Statistics*, vol 14, pp 285–299.
43. Kate Siegfried and **Bruno Sansó** (2006) “Two Bayesian Methods for Estimating Parameters of the von Bertalanffy Growth Equation”. *Journal Environmental Biology of Fishes*, vol 77, pp 301–308.
44. Kumar Viswanath, Katia Obraczka, Athanasios Kottas and **Bruno Sansó** (2006) “A Statistical Equivalent Model for Random Waypoint Mobility: A Case Study”. In proceedings of Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS) 06.

45. Ricardo Lemos and **Bruno Sansó** (2006) “Spatio-temporal Variability of Ocean Temperature in the Portugal Current System”. *Journal of Geophysical Research Oceans*, 111, C04010, doi:10.1029/2005JC003051.
46. Herbie Lee, **Bruno Sansó**, Weining Zhou and David Higdon (2005) “Inferring Particle Distribution in a Proton Accelerator Experiment”. *Bayesian Analysis*, vol 1, pp 249–264.
47. Peter Müller, **Bruno Sansó** and Maria De Iorio (2004) “Optimal Bayesian Design by Inhomogeneous Markov Chain Simulation”. *Journal of the American Statistical Association*, vol 99, pp 788–798.
48. **Bruno Sansó** and Lelys Guenni (2004) “A Bayesian Approach to Compare Observed Rainfall Data to Deterministic Simulations”, *Environmetrics*, vol 15, pp. 597–612.
49. Gabriel Huerta, **Bruno Sansó** and Jonathan R. Stroud (2004). “A Spatio-Temporal Model for Mexico City Ozone Levels”. *Applied Statistics*, vol. 53, pp.231–248.
50. Abel Rodríguez, Giselle Álvarez and **Bruno Sansó** (2003) “Objective Bayesian Comparison of Laplace Samples from Geophysical Data”. In *Bayesian Statistics 7*. Edited by J.M. Bernardo, M.J. Bayarri, J.O. Berger, A.P. Dawid, D. Heckerman, A. F. M. Smith and M. West. Oxford University Press. pp. 671–670.
51. Giselle Álvarez, **Bruno Sansó**, Reinaldo Michelena and Juan Ramón Jiménez (2003). “Lithologic Characterization of a Reservoir Using Continuous Wavelet Transforms”. *IEEE Transactions on Geoscience and Remote Sensing*, vol. 41, pp. 59–65.
52. Lelys Guenni, **Bruno Sansó** and Lisbeth Betancourt, (2002). “Oceanic Influence on the Precipitation of the South-East of Venezuela”. *Environmetrics*, vol. 13, pp. 263–279.
53. James O. Berger, Víctor De Oliveira and **Bruno Sansó** (2001). “Objective Bayesian Analysis of Spatially Correlated Data”, *Journal of the American Statistical Association*, vol. 96, pp. 1361–1374.
54. Jonathan Stroud, Peter Müller and **Bruno Sansó**, (2001). “Dynamic Models for Spatio-Temporal Data”, *Journal of the Royal Statistical Society, Series B*, vol. 63, pp. 673–689.
55. **Bruno Sansó** and Lelys Guenni, (2000). “A Non-Stationary Multi-Site Model for Rainfall”, *Journal of the American Statistical Association*, vol. 95, pp. 1064–1089.
56. Keith R. Abrams, Paul C. Lambert, **Bruno Sansó**, Chris Shaw, Theresa M. Marteau, (2000). “Meta-Analysis of Heterogeneously Reported Study Results - A Bayesian Approach” in *Meta-Analysis in Medicine and Health Policy*. Edited by Don Berry and Dalene Stangl, Marcel Dekker, Biostatistics series, vol. 4., pp. 29–64.
57. **Bruno Sansó** and Lelys Guenni, (1999). “A Stochastic Model for Tropical Rainfall at a Single Location”, *Journal of Hydrology*, vol. 214, pp. 64–73.
58. **Bruno Sansó** and Lelys Guenni, (1999). “Venezuelan rainfall data analysed using a Bayesian space-time model”, *Applied Statistics*, vol. 48, pp. 345–362.

59. **Bruno Sansó** and Peter Müller, (1998). “Redesigning a Network of Rainfall Stations”. In *Case Studies in Bayesian Statistics*, vol. IV, p. 383-394, Springer-Verlag, NY.
60. A. Reyna-Bello, F. A. García, M. Rivera, **B. Sansó** y P. M. Aso (1998). “Enzyme Linked Immunoabsorbent Assay (ELISA) for Detection of Anti-Trypanosoma Evans Equine Antibodies”. *Veterinary Parasitology*, vol. 80, 149–157.
61. Keith Abrams and **Bruno Sansó**, (1998). “Approximate Bayesian Inference for Random Effects Meta-Analysis” *Statistics in Medicine*, vol. 17, p 201–218.
62. **Bruno Sansó**, (1997). “Simple Approximations for Location and ANOVA Models with Non-Conjugate Priors” *Test*, vol. 6, p 119-126.
63. **Bruno Sansó**, Luis R. Pericchi and Elías Moreno (1996). “On the robustness of the intrinsic Bayes factor for nested models”. (with discussion). *Bayesian Robustness 2*, Edited by J. Berger, F. Ruggeri, and L. Wasserman, IMS Monographs, p 157–176.
64. A. Bosnjak, G. Bevilacqua, G. Passariello, F. Mora, **B. Sansó** and G. Carrault (1995). “An approach to intelligent ischemia monitoring”. *Med. & Biol. Eng. & Comput.*, vol. 33, p 794–756.
65. L. R. Pericchi and **Bruno Sansó** (1995). “A note on Bounded Influence in Bayesian Analysis”. *Biometrika*, vol. 82 No. 1, p. 223-5.
66. **Bruno Sansó** and L. R. Pericchi (1994). “On Near Ignorance Classes”. *Revista Brasileira de Probabilidade e Estadística*. vol. 8, No. 2, p 119–126
67. **Bruno Sansó** and L. R. Pericchi (1994). “Large Classes of Proper Prior for Linear Models”. *Communications in Statistics: Theory and Methods*, vol. 23.
68. L. R. Pericchi, **Bruno Sansó** and A. F. M. Smith (1993). “Posterior Cumulant Relationships in Bayesian Inference Involving the Exponential Family”. *Journal of The American Statistical Association*, vol. 88, p. 1419–26.
69. P. Debollain, M. Torres, E. Molina, **Bruno Sansó**, (1992). “Características Socio-demográficas y nutricionales de una muestra de mujeres embarazadas de nivel socio-económico obrero marginal”. *Anales Venezolanos de Nutrición*, vol 2, p 15–20.
70. **Bruno Sansó** and L. R. Pericchi, (1992). “Imprecise Bayesian Inference for Location Models”. *Proceedings of the IV CLAPEM*, p 221–227.
71. **Bruno Sansó** and L. R. Pericchi, (1992). “Near Ignorance Classes of Log-Concave Priors for the Location Model”. *Test*, vol 1, # 1, p 27–32.
72. **Bruno Sansó**, (1990). “Análisis de Muestreos Repetidos Basados en Modelos Superpoblacionales”. *Proceedings of the III CLAPEM*. p. 183–192.

## MONOGRAPHS

1. Alexandra Schmidt and **Bruno Sansó** (2006) “Modelagem Bayesiana da Estrutura de Covariância de Processos Espaciais e Espaço Temporais”. (In Portuguese). Monograph prepared for the short course on space and space-time models given at the 17-th Simposio Nacional de Probabilidade e Estatística, July 24–28, 2006. Caxambu, Brazil.

#### NON-REFEREED PUBLICATIONS

1. **Bruno Sansó**, L. Mark Berliner, Dan S. Cooley, Peter F. Craigmile, Noel A. Cressie, Murali Haran, Robert B. Lund, Douglas W. Nychka, Chris Paciorek, Steve R. Sain, Richard L. Smith, Michael L. Stein (2014) “Statistical Science: Contributions to the Administrations Research Priority on Climate Change”, a white paper of the American Statistical Association Advisory Committee for Climate Change Policy.
2. Richard W. Katz, Peter F. Craigmile, Peter Guttorp, Murali Haran, **Bruno Sansó** and Michael L. Stein (2013) “Commentary: Uncertainty analysis in climate change assessments”. *Nature Climate Change*, 3, 769–771, doi:10.1038/nclimate1980
3. **Bruno Sansó** (2013) Review of “Statistics for Spatio-Temporal Data”, by Noel Cressie and Chris Wikle. *Mathematical Geosciences*, vol. 45, 253–254 DOI 10.1007/s11004-012-9430-5.
4. Invited discussion of Wikle, C.K. and Hooten, M.B. (2010) “A General Science-Based Framework for Dynamical Spatio-Temporal Models” *Test*, DOI 10.1007/s11749-010-0212-4.
5. Review of “Statistical Decision Theory: Estimation, Testing and Selection” by Friedirch Liese and Klaus-J. Miescke (2009). *Journal of the American Statistical Association* vol. 104, p. 1288.
6. Invited discussion of Gelfand A.E., Schmidt A., Banerjee S. and Sirmans C.F. (2004) “Non-stationary Multivariate Process Modeling through Spatially Varying Coregionalization”, *Test*, **13**, pp. 263–312.
7. Herbie Lee, **Bruno Sansó**, Weining Zhou and David Higdon (2004) “Ideas for Statistical Inference for a Proton Simulator”. *Proceedings of the American Statistical Association*, Section in Bayesian Statistical Science [CD-ROM]. American Statistical Association.
8. Giselle Álvarez, **Bruno Sansó**, Reinaldo Michelena, Juan Ramón Jiménez (2003). “Spatial Estimation of Reservoir Properties Using Bayesian Wavelet Regression”. *Proceedings of the American Statistical Association*, Section in Bayesian Statistical Science [CD-ROM]. American Statistical Association.
9. Gabriel Huerta, **Bruno Sansó** and Jonathan Stroud (2000). “Space-Time Analysis of Mexico City Ozone Levels”. *Proceedings of the American Statistical Association*, Section in Environmental Statistics .



10. Lelys Guenni and **Bruno Sansó**, (2000). “Combining Observed Point Rainfall Data and Dynamic Downscaling Using a Bayesian Approach”. Extended abstract presented at the *XX International Biometric Conference*, July 2000, Berkeley, CA, USA.
11. Invited discussion of “Default Approaches to Compare means of Normal Populations” by E. Moreno, F. Bertolino and W. Racugno in *Proceedings of the Workshop on Model Selection*, W. Racugno ed., p. 133–155, CNR, vol. 9, (1997).
12. Discussion of “The Intrinsic Bayes Factors for Linear Models” by J.O. Berger and L.R. Pericchi in *Bayesian Statistics 5*, J.M. Bernardo, J.O. Berger, A.P. Dawid and A.F.M. Smith eds., p. 25–44, Oxford University Press, (1996).

MEETINGS, CONFERENCES AND TALKS (LAST THREE YEARS)

- “Multi-scale models for non-stationary spatial datasets: Spatial statistics meets variable selection”, online seminar at the Department of Statistics, Univeristy of Illinois Urbana-Champaign, September 2020.
- “Spatio-Temporal Modelling using Integro-Difference Equations”, seminar at the Department of Statistics, Michigan State University, October 2019.
- “Multi-Scale Models for Large Non-Stationary Spatial Datasets”, seminar at Lawrence Livermore National Laboratory, July 2019. July 17 - August 1, 2019; Denver, Colorado.
- “Multi-Scale Models for Large Non-Stationary Spatial Datasets”, topic contributed talk at the Joint Statistical Meetings July 17 - August 1, 2019; Denver, Colorado.
- “Inferring Release Characteristics From an Atmospheric Dispersion Model”. Seminar at San José State University, October, 2018.
- “Inferring Release Characteristics From an Atmospheric Dispersion Model”. Invited talk at Opening Workshop of the Program on Model Uncertainty: Mathematical and Statistical August 20 - 24, 2018; Duke University, North Carolina.
- “Spatio-Temporal Modelling using Integro-Difference Equations”, Seminar at the University of Venice, July 2018.
- “Bayesian Non-parametric Methods for Renewal Processes”. Invited talk at the ISBA World Meeting, Edinburgh, June 2018.
- “Spatio-Temporal Modelling using Integro-Difference Equations”. Invited talk at the Workshop on Statistics and Data Science for Earth Systems, IRSA Annual Conference-2018 May 3-5, 2018; Minneapolis, Minnesota.
- “Spatio-Temporal Modelling using Integro-Difference Equations”. Seminar at Sandia National Laboratory, March 2018
- “Spatio-Temporal Modelling using Integro-Difference Equations”. Seminar at Los Alamos National Laboratory, March 2018

- Invited panelist at the Workshop on Remote Sensing, Uncertainty Quantification, and a Theory of Data Systems, Caltech, Pasadena, February 2018.
- “Spatial Models for Exceedences Over a Threshold”. Invited talk at TIES-GRASPA 2017 July 24 - July 26, 2017; Bergamo, Italy.
- “Uncertainty Quantification for Climate Models”. Seminar at North Carolina State University, February 2017.
- “Uncertainty Quantification for Climate Models”. Seminar at Bocconi Univeristy, Milano, Italy, January 2017.

#### MEMBERSHIP IN EDITORIAL BOARDS

- Editor in Chief of *Bayesian Analysis* (2016 - 2019), Editor (2009–2015), Associate Editor (2005–2009)
- Associate Editor of *Technometrics* (2006–2010)
- Main Guest Editor of the special issue of the *Journal of Statistical Planning and Inference* on Bayesian Inference for Stochastic Processes.
- Associate Editor of the *Journal of Statistical Planning and Inference* (2004–2007)

#### RESEARCH GRANTS AND PROJECTS

I have received funding from *California EPA* (2005), *CONICIT (Venezuela)* (1992, 1997, 2001, 2002), *Interamerican Institute for Global Change* (2000), *Los Alamos National Laboratory* (2003, 2005, 2007, 2008, 2009, 2010), *Lawrence Livermore National Laboratory* (2007, 2008), *National Oceanic and Atmospheric Administration* (2008, 2010), *National Science Foundation* (2004, 2004, 2005, 2009, 2010, 2011, 2013, 2014, 2015,2020), *National Aeronautics and Space Administration - University Affiliated Research Center* (2012, 2013) *UC-Mexus* (2006, 2011).

#### STUDENT SUPERVISION

- Daniel Kirsner, PhD project, “Nonstationary models for large spatial datasets using multi-resolution process convolutions”, July 2020.
- Sarah Jarvis, MS project, ”Comparison of Climate Model Simultions”, June 2019 .
- Brett Stacy, MS project, “Bayesian mixed effects Poisson models for evaluating Red Abalone density across management thresholds”, UCSC, June 2018.
- Mickey Warner, MS project, “Extreme value comparison of CanCM4 simulations and observations”, UCSC, March 2018
- Devin Francom, PhD project “Emulation and uncertainty quantification for models with functional response using Bayesian adaptive splines”, UCSC, August 2017.

- Ariana Hedges, MS project, “A spatio-temporal surplus model and its application to scallop abundance”, UCSC, August 2015.
- Robert Richardson, PhD thesis, “Flexible Integro-Differential Equations for Bayesian Models of Spatio-Temporal Data”, supervised jointly with Athanasios Kottas, June 2015.
- Joao Pereira, PhD thesis, “Convolution-Based Models for Spatially Referenced Count Data”, supervised jointly with Alexandra Schmidt, UFRJ, May 2015.
- Sai Xiao, PhD thesis, “Bayesian Non-Parametric Modelling for Some Classes of Temporal Point Processes”, supervised jointly with Athanasios Kottas, UCSC, March 2015.
- Celeste Tretto, MS project, “Measuring Bias of Sea Surface Temperature Measuring Devices in the Mediterranean Sea”, UCSC, August 2014.
- Francisco Beltrán, PhD thesis, “Quantifying the Impact of Climate Change on Oceanic Variables”, UCSC, March 2013.
- Tracy Holsclaw, PhD thesis “Statistical Modeling for Dark Energy and the Cosmological Constants”, supervised jointly with Herbie Lee, UCSC, June 2011.
- Teresa Jacobson , MS project, “San Francisco Bay Fish Abundance and Global Scale Climate Shifts”, UCSC, August 2010.
- Ricardo Lemos, PhD thesis “Hierarchical Bayesian Methods for the Marine Sciences: Analyses of Climate Variability and Fish Abundance”, University of Lisbon, Portugal, June 2010. **Winner of the Savage Award 2010 to best dissertation in Bayesian applications.**
- Elizabeth Pacheco, MS project “Bayesian Modeling Approaches to Poisson Processes”, UCSC, March 2009.
- Luis Acevedo-Arreguin, MS project “Spatio-Temporal Statistical Modeling of Crime Data: the Kernel Convolution Approach”, UCSC, June 2008.
- Daniel Zantedeschi, MS project “Bayesian Adventures in Covariance Sampling”, UCSC. June 2008.
- Aline Nobre, PhD thesis “Spatio-temporal models based on discrete convolutions”, supervised jointly with Alexandra Schmidt, University of Rio de Janeiro, Brazil. June 2007.
- Charles Curry, MS student working on the estimation of climate system properties. June 2007.
- Chris Wong, MS project “Forecasting support burden for the CISCO 2006 routers”, UCSC, December 2006.
- Weining Zhou, PhD dissertation “Analyzing Computer Simulation Experiments Using Process Convolutions”, supervised jointly with Herbie Lee, UCSC. December 2006.

- Aracelis Hernández, PhD dissertation “Spatio-Temporal Modelling of Rainfall Over the Caroní Catchment Area”, supervised jointly with Lelys Guenni, USB, January 2005.
- Xing Ji, MS project “A Bayesian Modeling Application to Estimating the Climate Change Impact on the Presence of Oaks in California”, UCSC, June 2005.
- Weining Zhou, MS thesis “Bayesian Process Convolutions for Computer Simulation Models”, UCSC, June 2005. Computer Code, supervised jointly with Herbie Lee.
- Giselle Álvarez, PhD dissertation “Using Seismic Data to Classify the Lithology and Estimate the Properties of an Oil Reservoir”, USB, March 2003.
- Lisbeth Betancourt, MSc dissertation “Statistical Modelling of the Ocean-Atmospheric Effect on the Rainfall in Southern Venezuela”, supervised jointly with Lelys Guenni, USB, April 2000.

#### TEACHING

- Two weeks course on Computer Experiments, Gaussian Processes and Other Emulators, Lawrence Livermore National Laboratory, July 2019.
- Short course on spatial statistics, 33 Foro Nacional de Estadística October 1-5, 2018; Guadalajara, Mexico.
- 2017 Applied Bayesian Statistics Summer School: Modeling Spatial and Spatio-Temporal Data with Environmental Applications June 19 - 23, 2017; Como, Italy.
- Short course on spatial statistics, Department of Decision Sciences, University Bocconi, Milano, Italy, January 2017.
- Short course on spatial statistics”, XLII National Chilean Conference of Statistics, October 14 - 16, 2015, Concepción, Chile.
- Short course on spatial statistics, Department of Statistical Sciences, University “La Sapienza”, Rome, Italy, 2014.
- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Boston, 2014.
- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Miami Beach, 2011.
- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Washington, DC, 2009.
- Graduate Director of the program in statistics and stochastic modeling, UCSC, 2004-2007.
- Co-founder of the Program in Statistics and Stochastic Modeling, UCSC, 2004.

- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Seattle, 2006.
- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Minneapolis, 2005.
- Short course on Bayesian Inference for the Continuing Education Section of the Joint Statistical Meetings, Toronto, 2004.
- Graduate Director of the program in statistics, USB. Sep. 2000 to Sep. 2001.
- Head of the Statistics Section of the Department of Scientific Computing and Statistics of USB. 1998-2000.
- Co-founder of the graduate program in statistics, USB, 1997.
- Graduate level courses: I have designed and taught courses in Statistical Inference, Statistical Modelling, Linear Models, Decision Theory, Markov Chain Monte Carlo Methods, Multivariate Statistics, Spatial Statistics, and Time Series since 1992.
- Undergraduate level courses: I have taught a large number of courses in elementary probability, statistics and numerical analysis for Scientists and Engineers since 1987. Most of these classes have been of more than a hundred students and many of them of up to 300.