

CURRICULUM VITAE

LELYS ISAURA BRAVO DE GUENNI

DATE OF BIRTH:

22 of September 1958

PLACE OF BIRTH:

Caracas, Venezuela

CITIZENSHIP:

Venezuelan; Passport No. 5.016.311

CIVIL STATUS:

Married, two children (23 and 17 years old)

ADDRESS:

Home:

Urb. Terrazas del Club Hipico. Res. Los Riscos
III. Piso 12. Apto. 123. Baruta. Edo. Miranda
Ph: +58-2-9765759

Work:

Universidad Simón Bolívar. Departamento de Cómputo
Científico y Estadística y Centro de Estadística y
Software Matemático (CESMa). APDO. 89.000. Caracas
1080-A. Ph: +58-2-9063233/3234. Fax: +58-2-9063232/3234
e-mail: lbravo@cesma.usb.ve, lleysbravo@gmail.com

EDUCATION:

Undergraduate:

Universidad "Simon Bolívar", Baruta, Edo. Miranda, Venezuela, 1975-1980.

Obtained degree: Bachelor in Mathematics.

Graduate:

Master Degree:

Universidad "Simon Bolívar", Baruta, Edo. Miranda, Venezuela, 1980-1982.

Obtained degree: Master of Science in Water Resources Engineering and Planning.

Thesis: An alternative method for flood routing in rivers with tributaries (Honours).

Doctor of Philosophy:

Griffith University, Brisbane, Nathan, QLD 4111, Australia, 1987-1992.

Obtained degree: PhD taken in the Division of Environmental Sciences. **Thesis:** Stochastic modelling of temporal and spatial variability of weather patterns for crop model applications.

ACTUAL POSITION:

- Full Professor in Probability and Statistics at the Department of Scientific Computing and Statistics. Universidad Simón Bolívar Caracas, Venezuela. Feb, 1999 – present (Retirement situation from the 1st of September, 2007).
- Visiting Professor at the University of Stuttgart, Institute für Wasserbau, Stuttgart, Germany, 1st Sep, 2007 – 30th Nov, 2007.

PROFESSIONAL EXPERIENCE:

TEACHING:

- Tutor of Mathematics IV and VI. Universidad Simón Bolívar. Venezuela. Jan-Jul, 1978.
- Tutor of Advanced Calculus I, II, and III. Universidad Simón Bolívar. Venezuela. Sep 1978 - Jul 1979.
- Undergraduate teaching assistant. Department of Mathematics. Universidad Simón Bolívar. Venezuela. Sep -Dic, 1979.
- Graduate teaching assistant. Department of Mathematics. Universidad Simón Bolívar. Venezuela. Sep 1980 - Sep 1982.
- Lecturer (Part time). Department of Mathematics. Universidad Simón Bolívar. Venezuela. Sep - Dic, 1982.
- Tutor of Data Analysis I and II, Mathematics and Statistics I and II, Mathematical Techniques A. Griffith University. Brisbane, Australia. Feb 1988 - Nov 1991.
- Invited lecturer at the International Workshop on Data Base Development for Climatic Risk Assessment. COMCIAM Program. Australian International Assistance Development Bureau. Aug 11-29 1992. Barbados West Indies.
- Lecturer (Part time). Department of Mathematics. Universidad Simón Bolívar. Venezuela. Sep 1992 - Dic 1993.
- Lecturer in Agricultural Climatology. Agronomy Faculty. Universidad Central de Venezuela. Maracay, Venezuela. May - Oct, 1993.
- Lecturer in Times Series Analysis in Agricultural Applications. Agronomy Faculty. Universidad Central de Venezuela. Sep - Dic, 1992 and Sep - Dic, 1993.

- Assistant Professor at the Department of Scientific Computing and Statistics. Universidad Simón Bolívar, Caracas, Venezuela. Jan, 1994 - Dic., 1995.
- Associate Professor at the Department of Scientific Computing and Statistics. Universidad Simon Bolivar, Caracas, Venezuela. Jan, 1996 – Jan, 1999.
- Full Professor at the Department of Scientific Computing and Statistics. Universidad Simon Bolivar, Caracas, Venezuela. Feb, 1999 – Present.
- Director of the Center of Statistics and Mathematical Software (CESMa). Universidad Simón Bolívar. Caracas, Venezuela. Sep, 2001 – Dec., 2003.
- Head of the Information Technology Laboratory at Universidad Simón Bolívar, Caracas, Venezuela, April, 2005 – August, 2007 .

RESEARCH:

- Computer Assistant in the National Plan of Land Evaluacion. Ministry of Environment and Natural Resources. (MARNR). Caracas, Venezuela. Jan - Sep, 1980.
- Associate Researcher in the graduate program of Water Resources, Engineering and Plannig. Universidad Simón Bolívar, Venezuela. Sep 1982 - Apr 1984.
- Research Scientist at the Centro Nacional de Investigaciones Agropecuarias, CENIAP (National Centre for Agricultural Research). Maracay, Venezuela. May 1984 - Dec 1993.(on leave for PhD studies from Feb 1987 to Apr 1992).
- Research Scientist. Drought Research Group. Queensland Department of Primary Industry. Brisbane, Australia. Sep 1991 - Feb 1992.
- Research Scientist at the Centro de Estadística y Software Matemático, Universidad Simon Bolivar, Caracas, Venezuela, involved in the following research projects:
 - Development of algorithms for the simulation of climatic variables (PI). Jan, 1995 – Dec., 1995. Project funded by Universidad Simon Bolivar.
 - Precipitation modeling in space and time for climate impact studies in Venezuela. (PI). Project No. S1-2770 funded by the Venezuelan Council of Scientific Research. Oct, 1995 – Oct, 1998.
 - Development and application of computational methods for the quantitative analysis of data and complex models. (Co-PI). Project No. G97-000592 funded by the Venezuelan Council of Scientific Research. Jan, 1997 – Jul, 2003.
 - Biosphere-Atmosphere interactions in La Gran Sabana, Parque Nacional Canaima, Estado Bolivar, Venezuela. (Co-PI). Project No. G98-001124 funded by the Venezuelan Council of Scientific Research. Jan, 1998 – present.
 - Co-PI of the ALFA Network HYDEL (Hydrology for Europe and Latin America) funded by the European Union during year 1999, jointly with scientists from Austria, Germany, Colombia, Ecuador and France.

- Co-PI of the IAI-PESCA research project No. 011: *Downscaling activities in the context of the LBA domain*. Oct. 2000 – Oct. 2002.
- Co-PI of the Project: *Assessment of extreme rainfall vulnerability for South America*. Project funded by UNESCO Montevideo. Joint Project with the University of New Hampshire, USA. Project finished in Dec, 2001.
- PI of the project: Development of Indicators of inter-annual variability of precipitation for South America: Period 1960-2000. *Project funded by UNESCO Montevideo. Jul-Dec., 2003*.
- PI of the project: Statistical modelling of the vulnerability and risk of the Venezuelan population to extreme rainfall. Project funded by the Venezuelan Fund of Scientific Research (FONACIT). Jul, 2003 – present.
- Hydroclimatic Data repository development for Environmental and Epidemiological Risk Assessment (Co-PI). Project funded by the Venezuelan Fund of Scientific Research (FONACIT). Jan. 2006 – present.

VISITING FELLOWSHIPS:

- Visiting Professor: University of Stuttgart. Institute of Water Resources. Aug - Sep, 1995.
- Visiting Professor: Australian National University, Centre for Resources and Environmental Studies. Jul - Aug, 1996.
- Visiting Professor: University of New Castle upon Tyne, Department of Civil Engineering. Aug, 1997.
- Visiting Professor: Bodenkultur University. Institute of Water Resources. May, 1999.
- Visiting Professor (Sabbatical year): University of New Hampshire, Institute for the Study of the Earth, Ocean and the Space, Complex Systems Research Center, Water System Analysis Group, Sep, 1st, 2000 until Jul, 15th, 2001.
- Visiting Professor: Laboratory GRESE (Laboratory for Risk Management in Water Sciences), ENGREF, Paris, France, Jul, 15th 2001 until Aug, 20th, 2001.
- Visiting Professor: Potsdam Climate Impact Research Institute (PIK). Potsdam, Germany. Aug, 30th – Sep, 10th, 2005.
- Visiting Professor. Stuttgart University, Water Resources Institute, Stuttgart, Germany. Sep, 11th - Sep, 29th, 2005.
- Visiting Professor. Mathematics Research Center, Guanajuato, México. Apr, 2006.
- Visiting Professor. Applied Mathematics and Statistics Department. University of California in Santa Cruz. August 2006.

AWARDS

- Griffith University Postgraduate Research Scholarship Award. Jan, 1989 - March, 1991.
- Classified Researcher Level II (maximum level is IV) in 2005 (renewed in 1995, 1997, 1999 and 2001) by the Venezuelan System for the promotion of research (SPI).
- Annual prize for the best scientific paper (Engineering area) for the work: Sansó, B. and **Guenni, L.** 1999. Venezuelan rainfall data analysed using a Bayesian space-time model. *Applied Statistics. Journal of the Royal Statistical Society*, 48 (3): 345-362. Venezuelan Council of Scientific Research (1999-2000).

AREAS OF INTEREST:

Statistical Climatology and Climate Data Analysis.

Climate Risk Assessment and Hydrological Modeling applications.

Stochastic Weather Modeling.

Stochastic Hydrology.

Environmental Statistics.

Spatial Statistics.

SPECIAL TRAINING COURSES:

- Mathematical Models in Water Quality and Control. Universidad Simón Bolívar, Caracas, Venezuela. 23-27 Mar, 1981.
- Advanced course in Models and Processes of Crop Production. International Institute of Advanced Studies. Caracas, Venezuela. 3-14 sep, 1984.
- Course on Experimental Design. CENIAP. Maracay, Venezuela. Oct, 1984.
- Course on Scientific Writing. CENIAP. Maracay, Venezuela. Nov, 1984.
- International Workshop on System Analysis and Crop Simulation for Agro technology Transfer. International Institute of Advanced Studies. Caracas, Venezuela. 3-14 Dec, 1984.
- Training course in the International School of Water Resources. Colorado State University. U.S.A. 7 Jan - 6 Jul, 1985. Training consisted of one semester graduate coursework full time.
- Research training at the USDA Temple Research Station, Texas, 6 Jul - 20 Jul, 1985. Research topic: Stochastic models of weather sequences.
- International Workshop on System Analysis and Crop models. University of Jordan, Amman, Jordan, 2-11 Nov, 1985.

- Iberoamerican Workshop on Floods and Natural Disasters. Spanish International Cooperation Agency. Antigua, Guatemala. 5- 9 May, 2006.

GRADUATE STUDENTS TUTORED

Oscar Silva. MSc. in Soil Sciences (honours), Universidad Central de Venezuela, Maracay, Venezuela. 1995.

Marisabel Rojas Polanco. MSc. in Statistics, Universidad de Los Andes, Merida, Venezuela. 1996.

Aracelis Hernandez González. MSc. in Mathematics. Universidad Simón Bolívar Caracas, Venezuela. 1998.

Lisbeth Betancourt. MSc. in Statistics. Universidad Simón Bolívar, Caracas, Venezuela. 2000.

Dhamelys Saade. Specialist in Computacional Statistics. Universidad Simón Bolívar, Caracas, Venezuela. 2001.

Carlos Dommar. Specialists in Computacional Statistics. . Universidad Simón Bolívar, Caracas, Venezuela. 2002.

Aracelis Hernandez González. Doctor in Engineering. Universidad Simón Bolívar. Caracas, Venezuela. 2005.

Lisbeth Torres. MSc. in Computer Sciences. Universidad Simón Bolívar, Caracas, Venezuela, 2005.

María Dolores Delgado. MSc. in Biological Sciences. Universidad Simón Bolívar. Caracas, Venezuela. 2005. (With Honours)

PUBLICATIONS

1. **Guenni, L.B.** de, Valdés, J., Scherer, G. and Maulino, C..1983. Un método alternativo para el tránsito de crecientes en rios con tributarios. IV Jornadas Nacionales de Ingenieria Hidráulica. Caracas, Venezuela. June, 1983.

2. Córdova, J.R., Rodriguez-Iturbe, I. and **L.B. de Guenni**. 1983. On the estimation of the mean and variance of Annual Sediment Yield based on basin and storm characteristics. In: Scientific Procedures applied to the Planning, Design and Management of Water Resources Systems (Proceedings of Hamburg Symposium, August, 1983). IAHS Publ. Num. 147:125-139.

3. Comerma, J.A., **L.B. de Guenni** y G. Medina. 1985. Validación del Balance Hidrico del modelo CERES-MAIZ en la zona de Maracay, Estado Aragua, Venezuela. *Agronomia Tropical*, 35:115-132.
4. **Guenni, L.B.** de y Wiedenhofer, H. 1985. Aplicación de una metodología propuesta de validación de los modelos de simulación IBSNAT. Centro Nacional de Investigaciones Agropecuarias. Serie A. Maracay. Venezuela.
5. Comerma, J.A. and **L.B. de Guenni**. 1986. The IBSNAT simulation models as a mean of Quantitative Land Evaluation in Development countries. In: Burrough, B. and Mc Cormack. Quantified Land Evaluation Procedures. ITC Publ. Num. 6. Enschede, The Netherlands. pp. 44-49.
6. Comerma, J.A. and **L.B. de Guenni**. 1986. The use of Simulation models for Agrotechnology Transfer in Venezuela. IBSNAT Symposium. XIII Congress Intern. Soc. of Soil Sci. Hamburg, W. Germany.
7. Wagner, M., **L.B. de Guenni**, G. Medina y M. Mujica. 1986. Evaluacion de un Modelo de Riego aplicado en plantillas de caña de azucar (*Saccharum sp.*) en condiciones de suelo Mollisol. *Caña de Azucar*. 4(2):143-167.
8. Wagner, M., A. Barrios, G. Medina y **L. de Guenni**. 1988. Evaluacion de un modelo de riego en caraota (*Phaseolus vulgaris L.*) en la Estación Experimental de Santa Cruz, Estado Aragua. *Agronomia Tropical*, 38:109-133.
9. **Guenni, L.**, Charles-Edwards, D., Rose, C.W., Braddock, R. and Hogarth, W. 1990. Stochastic weather modelling: A phenomenological approach. *Mathematics and Computers in Simulation*, 32:113-118.
10. **Guenni, L.** and Hutchinson, M. 1990. Stochastic Weather Modelling and the Problem of Data Sparsity. Poster Paper Proceedings. International Symposium on Climatic Risk in Crop Production. 2-6 July, 1990. The University of Queensland, Brisbane, Australia. pp. 10-11.
11. **Guenni, L.**, Rose, C.W., Hogarth, W., Braddock, R. and Charles-Edwards, D. 1990. Seasonal Changes in the Interrelationships between Climatic Variables. *Agricultural and Forest Meteorology*, 53:45-58.
12. **Guenni, L.**, Rose, C.W., Hogarth, W. and Braddock, R. 1991. Use of stochastically simulated weather for crop model predictions. Proceedings of the Conference on Agricultural Meteorology. 17-19 July, 1991. The University of Melbourne, Parkville, Australia. pp. 65-68.
13. Hutchinson, M.F. and **Guenni, L.** 1992. Spatial interpolation of Real Time monthly rainfall for Queensland. Proceedings of the Sixth Queensland Hydrology Symposium. 11-12 February, 1992. The University of Queensland, Brisbane, Australia.
14. **Guenni, L.** y Prada, Y. 1993. Evaluación de la disponibilidad de humedad de los suelos para el proyecto de evaluación de tierras Hamaca 400. Reporte Técnico. Contrato de Servicios FONAIAP-PALMAVEN. 52 pp.

15. **Guenni, L.** and M. Hutchinson. Discussion on Spatial-Temporal Analysis of Weather Data and its relationship with Downscaling. Downscaling workshop of the Weather Generator Project. BAHC-F4, Rep. No. 4. 25-28, June, 1994. Karlsruhe, Germany, pp.53-57.
16. **Guenni, L.** Spatial Interpolation of Rainfall Statistics at different time scales. Proceedings of the Sixth International Meeting on Statistical Climatology. 19-23 Junio, 1995. Galway, Irlanda. pp. 567-570.
17. **Guenni, L.** 1995. Spatial Interpolation of the Parameters of Stochastic Weather Models. In: G. Paoli (ed.) Climate Change, Uncertainty and Decision-Making. Institute for Risk Research. Waterloo, Canada. pp. 61-79.
18. **Guenni, L.**, Hutchinson, M.F., Hogarth, W., Rose, C.W. and Braddock, R. 1996. A model for the Seasonal Variation of Rainfall at Adelaide and Turen. *Ecological Modelling*, 85:203-217.
19. Sansó, B. and **Guenni, L.** 1996. A Bayesian estimation of the parameters of a space-time model for rainfall. CESMa Tech. Rep. 96-01. Universidad Simón Bolívar, Caracas, Venezuela. 14 pp.
20. **Guenni, L.**, Bárdossy, A. and U. Haberlandt. 1996. Spatial Interpolation of rainfall data at different time scales. CESMa Tech. Rep. 96-11. Universidad Simón Bolívar, Caracas, Venezuela.
21. Sansó, B. and **Guenni, L.** 1997. A dynamic model for Tropical rainfall. CESMa Tech. Rep. 97-02. Universidad Simón Bolívar, Caracas, Venezuela.
22. **Guenni, L.**, Ojeda, F. and M.C. Key. 1997. Periodic model selection for rainfall using Conditional Maximum Likelihood. CESMa Tech. Rep. 97-03. Universidad Simón Bolívar, Caracas, Venezuela.
23. **Guenni, L.** 1997. Spatial Interpolation of Stochastic Weather Model Parameters. *Journal of Environmental Management*, 49:31-42.
24. **Guenni, L.** 1997. Space-time modelling of rainfall for climate impact assesments in the Tropics. Proceedings of the 51st session of the International Statistical Institute.
25. **Guenni, L.**, Ojeda, F. and M.C. Key. 1998. Periodic model selection for rainfall using Conditional Maximum Likelihood. *Environmetrics*, 9:407-417.
26. **Guenni, L.** and M. Loreto. 1998. Space-time modelling of monthly rainfall for climate impact studies in Venezuela. Centro de Estadística y Software Matemático, Universidad Simón Bolívar. Tec. Rep. 98-06. 14 pp.
27. **Guenni, L.** and Andrés Bárdossy. 1998. Disaggregation of highly seasonal monthly rainfall. Centro de Estadística y Software Matemático, Universidad Simón Bolívar. Tec. Rep. 98-10. 24 pp.
28. **Guenni, L.** and M.F. Hutchinson. 1998. Spatial Interpolation of the parameters of a rainfall model from ground-based data. *Journal of Hydrology*, 213-213 (1-4): 335-347.

29. Hutjes, R.W.A. *et al.* (**L. Guenni** included). 1998. Biospheric Aspects of the Hydrological Cycle. *Journal of Hydrology*, 213-214(1-4):1-21.
30. Pielke, R.A. (Sr.) and **L. Guenni**, 1999. Vulnerability assessment of water resources to changing environmental conditions. *Global Change Newsletter*, No. 39, pp. 22-23.
31. Sansó, B. and **Guenni, L.** 1999. Venezuelan rainfall data analysed using a Bayesian space-time model. *Applied Statistics . Journal of the Royal Statistical Society*, 48 (3): 345-362.
32. Sansó, B. and **Guenni, L.** 1999. A stochastic model for tropical rainfall at a single location. *Journal of Hydrology*, 214:64-73.
33. Sanso, B. and **Guenni, L.** 2000. A non-stationary Multi-site model for rainfall. *Journal of the American Statistical Association*, 95(452):1089-1100.
34. Castrillo, M., Fernandez, D., Calcagno, A.M., Trujillo, I and **Guenni, L.** 2001. Responses of ribulose-1,5-bisphosphate carboxylase, protein content, and stomatal conductance to water deficit in maize, tomato and bean. *Photosynthetica*, 39(4): 221-226.
35. **Guenni, L.** and Bárdossy, A. 2002. A two step disaggregation method for highly seasonal monthly rainfall. *Stochastic Environmental Research and Risk Assessment*. 16 (3): 188-206.
36. **Guenni, L.**, Sansó, B. and Betancourt, L. 2002. Oceanic influence on the precipitation of the South East of Venezuela. *Environmetrics*. 13: 263-279.
37. **Guenni, L.**, Hernandez, A. And Phillipone, M. 2003. Modelling population vulnerability and risk to extreme rainfall events in Venezuela. *Acta Científica Venezolana*, Vol. 54, Sup. 1: 2-12.
38. Sansó, B. and **Guenni, L.** 2004. A Bayesian approach to compare observed rainfall data to deterministic simulations. *Environmetrics*, 15:1-16.
39. Kabat P, Claussen M, Dirmeyer PA, Gash JHC, **Guenni L**, Meybeck M, Pielke RA Sr., Vörösmarty CJ, Hutjes RWA, Lütkeemeier S (Eds.). 2004. Vegetation, Water Humans and the Climate: a New Perspective on an Interactive System, Springer, Berlin, pp 566.
40. **Guenni, Bravo de, L.**, Cardoso, M., Goldammer, J., Hurtt, G., Mata, J.L., Ebi., K, House, J., Valdes, J. Norgaard, R. (rev. Ed.), 2005: Regulation of Natural Hazards. In: Rashid Hassan and Robert Scholes (Eds.): *The Millennium Ecosystem Assessment, Vol. I, Current State and Trends, Chapter 16, Part II*, pp. 441-454, Island Press, Washington DC.
41. Hernandez, A., **Guenni, L.** and Sansó, B. 2006. Extreme limit distributions of truncated models for daily rainfall. Tech Report ams2006-05. University of California at Santa Cruz

42. Hernandez, A., **Guenni, L.** and Sansó, B. 2006. Características de la precipitación extrema de algunas localidades de Venezuela. Submitted to Interciencia.

CONFERENCES, SIMPOSIA AND WORKSHOPS

1. Guenni, L.B. de, Valdés, J., Scherer, G. y Maulino, C. Un método alternativo para el tránsito de crecientes en ríos con tributarios. IV Jornadas Nacionales de Ingeniería Hidráulica. 8 al 11 de Junio, 1983. Caracas, Venezuela.
2. Comerma, J.A. y Guenni, L. Perspectivas del uso de modelos de simulación de cultivos prioritarios como instrumento de transferencia de agrotecnologías. IX Congreso Latinoamericano Ciencias del Suelo. 1986. Cali, Colombia.
3. Comerma, J.A. and L.B. de Guenni. The use of Simulation Models for Agrotechnology Transfer in Venezuela. IBSNAT Symposium. XIII Congreso Intern. Soc. of Soil Sci. 1986. Hamburg, W. Germany.
4. Comerma, J. y B. de Guenni, L. Algunos Resultados sobre la Validación del Modelo CERES-MAIZ en Venezuela. XXXVI Convención Anual de ASOVAC. 16 al 21 de Nov., 1986. Valencia, Venezuela.
5. Guenni, L. and D. Charles-Edwards. Phenomenological Random Generator for Crop Models. Fourth Queensland Hydrology Symposium. 1-2 Feb, 1989. Brisbane, Australia.
6. Guenni, L., D. Charles-Edwards, C.W. Rose, W. Hogarth. and R. Braddock. Stochastic Weather Modelling: A phenomenological approach. VIII SSA-IMACS Biennial Conference on Modelling and Simulation. 25-27 sep., 1989. Canberra, Australia.
7. Guenni, L. and M. Hutchinson. Stochastic Weather Modelling and the problem of Data Sparsity. 1990. International Symposium on Climatic Risk in Crop Production (Poster Paper Section). 2-6 Jul. Brisbane, Australia.
8. Guenni, L., Rose, C., Hogarth, W. and Braddock, R. Use of stochastically simulated weather for crop model predictions. Conference on Agricultural Meteorology. 17-19 Jul., 1991. Melbourne, Australia.
9. Hutchinson, M.F. and Guenni, L. Spatial Interpolation of Real Time Monthly Rainfall for Queensland. Sixth Queensland Hydrology Symposium. 11-12 Feb., 1992. Brisbane, Australia.

10. Guenni, L. Point Rainfall Generation for weather-driven Crop models: The Spatial Extension. Jornadas Panamericanas de Matematicas Aplicadas y Computacionales. 1-15 Enero, 1993. Caracas, Venezuela.
11. Guenni, L. Research Activities in the Venezuelan Amazonia. Preliminary Workshop on the Atmosphere-Geosphere Experiment in the Amazonia (LAMBADA/BATERISTA). 8-11 Sep., 1993. San José Dos Campos, Brasil (Invited Paper).
12. Guenni, L. Characterization of the interrelationships between climatic variables and their stochastic simulation. Workshop on risk estimation techniques for extreme weather events. 20-22 Feb., 1994. Toronto, Canada.
13. Guenni, L. and M. Hutchinson. Selección óptima del número de coeficientes de dos funciones periódicas ajustadas a un modelos de procesos puntuales de precipitación. VII Jornadas de Matemáticas. 23-25 Mar., 1994. Barquisimeto, Venezuela.
14. Guenni, L. and M. Hutchinson. Discussion on Spatial-Temporal Analysis of Weather Data and its relationship with Downscaling. Downscaling workshop of the Weather Generator Project (BAHC-F4). 25-28, June, 1994. Karlsruhe, Germany.
15. Guenni, L. and M. Hutchinson. Spatial Interpolation of the Parameters of a Rainfall model from ground-based data. First Science Conference of the BAHC IGBP Core Project and XX General Assembly of the European Geophysical Society. 3-7 April, 1995. Hambur, Germany.
16. Guenni, L. Spatial Interpolation of Rainfall Statistics at different time scales. Sixth International Meeting on Statistical Climatology. 19-23 June, 1995. Galway, Ireland.
17. Guenni, L., Bárdossy, A. and Haberlandt, U. The value of point data on the spatial interpolation of pollution related variables at different time scales. SPRUCE III Conference. 11-15 Dic., 1995. Mérida, México.
18. Ojeda, F., Key, M.C. y Guenni, L. Estudio de dos modelos estocásticos de precipitación mensual. XLV Convención Anual de ASOVAC. Nov., 1995. Caracas, Venezuela.
19. Guenni, L., Bárdossy, A. and Haberlandt, U. Una comparación empírica de Splines y Kriging para dos conjuntos de datos de lluvia en localidades contrastantes. IX Jornadas de Matemáticas. 24-26 Abril, 1996. Maracaibo, Venezuela.
20. Guenni, L., M.T. Martelo y A. Ramirez. Preparatory Activities of LBA in Venezuela. Reunión de Coordinación Científica del Experimento LBA (Large Scale Biosphere-Atmosphere Experiment in Amazonia. 27 Jun - 1 Jul, 1996. São José dos Campos, Brasil.

21. Guenni, L., M.C. Key and A. Hernandez. Modelling monthly Rainfall in a Tropical Environment. Sydney International Statistical Congress. 8 - 12 Jul., 1996. Sydney, Australia.
22. Guenni, L., M.C. Key and A. Hernandez. Periodic model selection for rainfall using Conditional Maximum Likelihood. Conference on Environmetrics. 4 – 8 Ago, 1997. Innsbruck, Austria.
23. Guenni, L. Space-time modelling of rainfall for climate impact assessment in the tropics. 18 – 26 Ago, 1997. 51 Session of ISI. Istanbul, Turquía. (Invited Paper).
24. Guenni, L. and A. Bárdossy. Disaggregation of highly seasonal monthly rainfall by simultaing annealing. XXIII General Assembly of the European Geophysical Society. 20 – 24 Apr, 1998. Nice, France.
25. Guenni, L. and R. Pielke. Disaggregation, high resolution regional scenarios vs. an integrated approach towards system thresholds and vulnerability. First BAHC Synthesis Workshop. 7 - 11 Mar, 1999. Obergeen, Italy.
26. Guenni, L. and Sansó, B. Combining Stochastic and Dynamic Downscaling using a Bayesian approach. XXIV General Assembly of the European Geophysical Society. 19-23 Abr, 1999. The Hague, Holland.
27. Guenni, L., Sanso, B. and L. Betancourt. Oceanic influence of the precipitation of the south-east of Venezuela. 15th conference on probability and statistics in the atmospheric sciences. 8-11 May, 2000. Asheville, NC, USA.
28. Guenni, L. and Sanso, B. Combining observed point data and dynamic downscaling using a Bayesian approach. Proceedings of the XX International Biometrics Conference. 2-7 July, 2000. Berkeley, CA, USA.
29. Guenni, L., Vörösmarty, C.J., Bjerklie, D.; Cardoso, M.; D’Almeida, C.; Green, P.; Pellerin, B. and Wollheim, W. A Biogeophysical approach to the vulnerability concept: Extreme Rainfall and Population Distribution in South America during 1999. Poster Paper. Global Change Open Science Conference. 10-13 July, 2001. Amsterdam, The Netherlands.
30. Guenni, L.: Modelos de vulnerabilidad y riesgo de la población a eventos extremos (invited conference). 1ra. Feria del Agua de Centroamérica y el Caribe. 25-28 Octubre. 2001. Panamá. República de Panamá.
31. Guenni, L. Approaches to improve precipitation data availability at different temporal and spatial resolutions. Second LBA-Hydronet workshop. 5-6 July. 2002. Manaus, Brazil.

32. Guenni, L. and Vörösmarty, C. Examples of Regional approaches and tools for Data Collection, Management and Access of Hydroclimatological Data in South America. (Invited Conference). GTNH (Global Terrestrial Network for Hydrology) Workshop. 18-20 Nov. 2002. Toronto. Canada.
33. Guenni, L.: Global Change Research in Venezuela (Invited Conference). Third IGBP Congress. 19-24 June, 2003. Banff, Canada.
34. Guenni, L. Modeling the Probability of Catastrophic Rainfall Events in the Venezuelan States. Poster Paper. International Workshop on Bayesian Data Analysis. 7-10 August, 2003. Santa Cruz, CA, USA.
35. Guenni, L., Vörösmarty, C.; Degryze, E.; Delgado, M.D. and Wollheim, W. Indicators of Change in Precipitation for South America from 1960 until 2000 for Vulnerability Studies. Poster Paper. Global Water System Project. Open Science Conference. 7-9 Oct. 2003. Portsmouth, NH, USA.
36. Guenni, L. Indicadores de Cambio en el Ciclo Hidrológico en América de Sur. (Charla Invitada). V Reunión de los Comités Nacionales y Puntos Focales del Programa Hidrológico Internacional (PHI) UNESCO. Guayaquil 18-19 Noviembre, 2003.
37. Guenni, L. and M.E. Pérez. Bayesian Modeling of the Probability of Catastrophic Rainfall events in Venezuela. Poster Paper. Conference of the International Society of Bayesian Analysis 2004. 3 – 7 May, 2004. Viña del Mar, Chile.
38. Guenni, L., Delgado, María Dolores, Vörösmarty, Charles and Wollheim, Wil. Population vulnerability to rainfall anomalies in South America: example of La Plata river basin and the ENSO effect. III Encuentro RUPSUR. 11 – 12 Nov, 2004. Santiago de Chile, Chile.
39. Guenni, L.. Modelaje jerárquico de la vulnerabilidad de la población anomalías de lluvia en Venezuela. XXXVI Jornadas Venezolanas de Matemáticas. Facultad de Ciencias. Universidad Central de Venezuela, 14 al 17 de marzo, 2005.
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- “Tránsito de crecientes en rios con tributarios”. May, 1983. Facultad de Ingeniería, UCV. Caracas, Venezuela.
- “Rainfall models and Crops”. Annual Meeting of the Australian Society for Operations Research. June, 1991. Griffith University. Brisbane, Australia.
- “Modelos Estocásticos de Simulación Climática y su Aplicación a Modelos de Cultivos”. July, 1992. Facultad de Agronomía, UCV. Postgrado en Estadística. Maracay, Venezuela.
- “Modelos de Producción Vegetal y Modelos Agrofisicos”. April, 1993. Facultad de Agronomía, LUZ. Cátedra de Agrofisica. Postgrado en Fruticultura. Maracaibo, Venezuela.
- “Hacia un modelaje espacial de las relaciones agua-suelo-planta”. April, 1994. Facultad de Agronomía, UCV. Postgrado en la Ciencia del Suelo. Maracay, Venezuela.
- “Spatial Analysis of Rainfall in Data Sparse Region”. September, 1995. Universidad de Stuttgart. Instituto de Recursos Hídricos. Stuttgart, Germany.
- “Spatial and Temporal Analysis of Rainfall in Data Sparse Regions”. August, 1996. Griffith University. Div. of Env. Sciences. Brisbane, Australia.
- “Space-time modelling of monthly rainfall for climate impact studies in the tropics”. August, 1997. University of Newcastle upon Tyne, Newcastle, England.
- “Modelaje de la precipitación en Espacio y Tiempo para estudios de Impacto Climático”. February, 1999.. Universidad Politécnica Nacional, Quito, Ecuador.

- “Space-time modelling of monthly rainfall for climate impact studies in the tropics”. May, 1999. Institute for Water Resources. University of Bodenkultur, Vienna, Austria..
- “Modelling the temporal and spatial variability of rainfall in the tropics”. December, 1999. Department of Atmospheric Sciences. Colorado State University, USA.
- “Space – Time models for rainfall”. October, 2000. Water Systems Analysis Group. University of New Hampshire, USA.
- “Population Vulnerability and Extreme Weather”. September, 2002. University of Bonn, ZEF, Germany.
- “Global Change Research Activities in Venezuela”. Third IGBP Congress. Meeting of the IGBP National Committees. May, 2003. Banff, Canada.
- “El Cambio Climático: Causas y Consecuencias sobre los recursos hídricos”. Primer congreso internacional del agua...por la vida. Puerto Ordaz, 9-10 Junio, 2005.
- “Population vulnerability and risk assessment to extreme rainfall events. Case study: South America”. Potsdam Institute for Climate Impact Research (PIK), Germany, sep 13th, 2005.
- “*Extreme value limit distributions of truncated models for daily rainfall*”. Institut für Wasserbau, Stuttgart University, Stuttgart, Germany, Sep 27th, 2005.
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NATIONAL AND INTERNATIONAL SCIENTIFIC COMMITTEES

- Member of the National Committee of Hydrology and Meteorology of the National Council of Scientific Research. 1992-1993.
- Member of the Science Steering Committee of the Core Project Biospherical Aspects of the Hydrological Cycle of the International Geosphere-Biosphere Program (IGBP). January, 1997 until October, 2002.
- Coordinator of the National Committee of the LBA project (Large Scale Biosphere-Atmosphere experiment in the Amazonia) since July, 1997 until September, 2000.
- Chair of the National Committee of IGBP in Venezuela. January, 1998 until September, 2000.
- Coordinating Lead Author of the Millennium Ecosystem Assessment, Conditions Working Group chapter on *Regulation of Natural Hazards: floods and fires*. Jan, 2003 – Nov, 2005.
- Member of the Board of Directors of The International Environmetrics Society as Regional Representative, since Sep., 2004.