

PRODUCCIÓN CIENTÍFICA DEL INSTITUTO DE INVESTIGACIONES EN MATEMÁTICAS APLICADAS Y EN SISTEMAS

ARTÍCULOS EN REVISTAS ARBITRADAS 2004

1. **Adler-Lomnitz, L.** [Family, networks and academics](#). *ETHNOS*. Suecia, 2004, Vol. 69, No. 1, p. 113-126. (acceso solamente al resumen)
2. **Adler-Lomnitz, L.** and Sheinbaum, D. [Trust, social networks and the informal economy: a comparative analysis](#). *Review of Sociology*. Hungría, 2004, Vol. 10, No. 1, p. 5-26. (acceso solamente al resumen)
3. Manzo, L.L., Aguirre, R. and **Álvarez, R.** [Multitemporal analysis of land surface temperatures using NOAA-AVHRR: preliminary relationships between climatic anomalies and forest fires](#). *International Journal of Remote Sensing*. Reino Unido, 2004, Vol. 25, No. 20, p. 4417-4423. (acceso solamente al resumen)
4. **Berlanga, R. and Rosenblueth, J.F.** [Extended conjugate points in the calculus of variations](#). *IMA Journal of Mathematical Control and Information*. Reino Unido, 2004, Vol. 21, p. 159-173.
5. **Berlanga, R. and Rosenblueth, J.F.** [A Sturm-Liouville approach applicable to different notions of conjugacy](#). *Applied Mathematics Letters*. Reino Unido, 2004, Vol. 17, No. 4, p. 467-472.
6. **Bribiesca, E.** [3D-Curve representation by means of a binary chain code](#). *Mathematical and Computer Modelling*. Reino Unido, 2004, Vol. 40, p. 285-295.
7. **Cruz, G.**, Levermore, C.D. and Luce, B.P. [Complex Ginzburg-Landau equations as perturbations of nonlinear Schrödinger Equations a Melnikov approach](#). *Physica D: Nonlinear Phenomena*. Holanda. 2004, Vol. 197, No. 3-4, p. 269-285.
8. Ricker, M. and **Del Río, R.** [Projecting diameter growth in tropical trees: a new modeling approach](#). *Forest Science*. EUA, 2004, Vol. 50, No. 2, p. 213-224. (acceso solamente al resumen)
9. Bulit, C., **Díaz, C.** and Montagned, D.J.J. [Assessing spatial and temporal patchiness of the autotrophic ciliate *Myrionecta rubra*: a case study in a coastal lagoon](#). *Marine Ecology Progress Series*. Holanda, 2004, Vol. 268, p. 55-67.

10. **Flores, G.** and Mischaikow, K. [Selection of slow diffusion in a reaction-difusion model](#). Rocky Mountain Journal of Mathematics. EUA, 2004, Vol. 34, p.1299-1324.
11. **Frauel, Y.**, Tajahuerce, E., Matoba, O., Castro, A. and Javidi, B. [Comparison of passive ranging integral imaging and active imaging digital holography for three-dimensional object recognition](#). Applied Optics. EUA, 2004, Vol. 43, No. 2, p. 452-462.
12. Bertaux, N., **Frauel, Y.**, Réfrégier, Ph. and Javidi, B. [Speckle removal using a maximum-likelihood technique with isoline gray-level regularization](#). Journal of the Optical Society of America A. EUA, 2004, Vol. 21, No. 12, p. 2283-2291.
13. **García, S.** Los aportes de Pierre Bourdieu en uso práctico. Las clases medias: lugares de indeterminación. Acta Sociológica. México, 2004, Nueva Época, No. 40, p. 215-255.
14. Fernández, B. and **González-Barrios, J.M.** [Multidimensional dependency measures](#). Journal of Multivariate Analysis. EUA, 2004, Vol. 89, p. 351-370.
15. **Gracia-Medrano, L.** and O'Reilly, F. [Transformations for testing the fit of the inverse-Gaussian distribution](#). Communications in Statistics (Theory and Methods). Canadá, 2004, Vol. 33, No. 4, p. 919-924. (acceso solamente al resumen)
16. **Gutiérrez, E.** [Bayesian classification methods](#). Psychology Science. Alemania, 2004, Vol. 46, No. 1, p. 52-64.
17. **Gutiérrez, E.** and Muliere, P. [Conjugate priors represent strong pre-experimental assumptions](#). Scandinavian Journal of Statistics. Theory and Applications. Reino Unido, 2004, Vol. 31, p. 235-246.
18. Consonni, G., Veronese, P. and **Gutiérrez, E.** [Reference priors for exponential families with simple quadratic variance function](#). Journal of Multivariate Analysis. EUA, 2004, Vol. 88, p. 335-364.
19. Von Eye, A. and **Gutiérrez, E.** [Configural frequency analysis: the search for extreme cells](#). Journal of Applied Statistics. Reino Unido, 2004, Vol. 31, p. 981-997.
20. Falconi, M., **Lacomba, E.A.** and Llibre, J. [On the parameter dependence of the real cubic in Arnold's form](#). Rendiconti del Circolo Matematico di Palermo. Italia, 2004, Tomo LIII, 53, p. 153-164. (acceso solamente al resumen)
21. Falconi, M., **Lacomba, E.A.** and Vidal, C. [The flow of classical mechanical cubic potential systems](#). Discrete and Continuous Dynamical Systems. EUA, 2004, Vol. 11, No. 4, p. 827-842.

22. **Medina, L.** and Moreno, E. [Ultrasonic imaging system using a 2D envelope beamformer technique: in-homogeneities location.](#) *Journal of Computational Acoustics*. Singapur, 2004, Vol. 12, No. 4, p. 571-585.
23. **Mena, R.H.** and Walker, S.G. [A density function connected with a non-negative self-decomposable random variable.](#) *Journal of Statistical Computation and Simulation*. Reino Unido, 2004, Vol. 74, No. 10, p. 765-775. (acceso solamente al resumen)
24. Barrientos, T., Martínez, S. y **Méndez, I.** [Validez de constructo, confiabilidad y punto de corte de la prueba de síntomas subjetivos de fatiga en trabajadores mexicanos.](#) *Salud Pública de México*. México, 2004, Vol. 46, No. 6, p. 516-523.
25. Bazan, A., **Méndez, I.**, Castañeda, S., Sánchez, B., Arévalo, A. y López, M. [Aportes para la evaluación de tres componentes lingüísticos de la enseñanza de la lengua escrita en el tercer grado de primaria.](#) *Revista Latina de Pensamiento y Lenguaje*. México, 2004, Vol. 12, No. 1, p. 37-67.
26. Romero, G., **Méndez, I.**, Tello, A. y Torner, C.A. [Daño neurológico secundario a hipoxia isquemia perinatal.](#) *Archivo de Neurociencias*. México, Vol. 9, No. 3, p. 143-150.
27. Gutiérrez, R., Díaz, G., Vega, S., **Méndez, I.**, Delgadillo, H., Pérez, N. y Pinto, M. [Determinación de los niveles de triacilglicerol \(% p/p\) presentes en grasas de origen animal y vegetal mediante la técnica de cromatografía de gases capilar.](#) *Agro Sur*. Chile, 2004, Vol. 32, No. 1, p. 68-75.
28. Noriega, M., Gutiérrez, G., **Méndez, I.** y Pulido, M. [Las trabajadoras de la salud: vida, trabajo y trastornos mentales.](#) *CSP Cadernos de Saúde Pública. Reports in Public Health*. Brasil, 2004, Vol. 20, No. 5, p. 1361-1372.
29. Sánchez, L., Acosta, E. and **Méndez, I.** [A cluster analysis model for caries risk assessment.](#) *Archives of Oral Biology*. EUA, 2004, No. 49, p. 719-725.
30. Vera, J. y **Méndez, I.** [Propuesta de protocolos combinados para detectar resistencia de semillas de frijol al ataque de gorgojos.](#) *Fitotecnia Mexicana*. México, 2004, Vol. 27, No. 3, p. 279-284.
31. García, E., Vargas, M., Velázquez, N., **Minzoni, A.A.** and De Miguel, F.F. [Synaptic integration in electrically coupled neurons.](#) *Biophysical Journal*. EUA, 2004, Vol. 86, p. 646-655.
32. Eslava, G., **Méndez, I.** and Castrejón, J.L. [Some aspects of sampling heterogeneous populations in electoral surveys.](#)

Estadística (Journal of the Inter-American Statistical Institute). Argentina, 2004, Vol. 168-169, p. 117-134.

33. Herrera, J., Maza, M.A., **Minzoni, A.A.**, Smyth, N.F. and Worthy, A.L. [Davydov soliton evolution in temperature gradients driven by hyperbolic waves](#). *Physica D: Nonlinear Phenomena*. Holanda, 2004, Vol. 191, p. 156-177.
34. Lerma, C., **Minzoni, A.A.**, Infante, O. and José, M.V. [A mathematical analysis of the cardiovascular control adaptations in chronic renal failure](#). *Journal of Artificial Organs*. Japón, 2004, Vol. 28, No. 4, p. 398-409. (acceso solamente al resumen)
35. **Minzoni, A.A.**, Smyth, N.F. and Worthy, A.L. [Evolution of two-dimensional standing and travelling breather solutions for the Sine-Gordon equation](#). *Physica D: Nonlinear Phenomena*. Holanda, 2004, Vol. 189, p. 167-187.
36. Castillo, J.A., Alonso, G., **Morales, L.B.**, [Martín del Campo, C., François, J.L. and Del Valle, E. BWR fuel reloads design using a tabu search technique](#). *Annals of Nuclear Energy*. EUA, 2004, Vol. 31, p. 151-161.
37. Espinosa, C., **Padilla, P.** and Álvarez-Buylla, E. [A gene regulatory network model for cell-fate determination during arabidopsis thaliana flower development that is robust and recovers experimental gene expression profiles](#). *Plant Cell*. EUA, 2004, Vol. 16, p. 2923-2939.
38. **Panayotaros, P.** [Averaging and Benjamin-Feir instabilities in a parametrically forced nonlinear Schrödinger equation](#). *Physics Letters. Section A: General Atomic and Solid State Physics*. Holanda, 2004, Vol. 323, p. 403-414.
39. **Panayotaros, P.** [Quartic normal forms for the periodic dispersion managed nonlinear Schrödinger equation](#). *Physica D: Nonlinear Phenomena*. Holanda, 2004, Vol. 191, p. 219-237.
40. **Rodríguez, K.** and Fleming, P.J. [Identifying the structure of non-linear dynamic systems using multiobjective genetic programming](#). *IEEE Transactions on Systems, Man and Cybernetics*. EUA, 2004, Vol. 34, No. 4, p. 531-547.
41. **Rosenblueth, J.F.** and Sánchez, G. [Strengthening Weierstrass' condition](#). *IMA Journal of Mathematical Control and Information*. Reino Unido, 2004, Vol. 21, No. 3, p. 275-294.
42. **Rosenblueth, J.F.** [A new notion of conjugacy for isoperimetric problems](#). *Applied Mathematics and Optimization*. EUA, 2004, Vol. 50, p. 209-228.

43. **Ruíz, A.** y **Gil, J.** [Redes variables en el tiempo: visualización con Pajek](#). *Redes. Revista Hispana para el Análisis de Redes Sociales*. España, 2004, Vol. 6, No. 4, Revista electrónica: <http://revista-redes.rediris.es>.
44. Kanaun, S.K., Levin, V.M. and **Sabina, F.J.** [Propagation of elastic waves in composites with random set of spherical inclusions \(effective medium approach\)](#). *Wave Motion*. Holanda, 2004, Vol. 40, p. 69-88.
45. Boutet de Monvel, A., Naboko, S. and **Silva, L.O.** [Eigenvalue asymptotics of a modified Jaynes-Cummings model with periodic modulations](#). *Comptes Rendus Mathématique. Académie des Sciences*. Francia, 2004, Vol. 338, No. 1, p. 103-107.
46. Ovalle, F.J., **Solano, J.** and Stojmenovic, I. [A parallel hill climbing algorithm for pushing dependent data in clients-providers-servers systems](#). *Journal of Mobile Networking and Applications (MONET)*. Holanda, 2004, Vol. 9, No. 4, p. 257-264.
47. **Solano, J.**, De la Cruz, J.M., Laureano, A.L. and Quintana, M.I. [GA-based statistical model to be used as an auxiliary tool in the diagnosis of human neurocysticercosis](#). *Wseas Transactions on Computers*. EUA, 2004, Vol. 3, No. 4, p. 1107-1112.
48. **Weder, R.** [Inverse scattering at a fixed quasi-energy for potentials periodic in time](#). *Inverse Problems*. Reino Unido, 2004, Vol. 20, p. 893-917.