

## **CV Resume**



Name: Dr. Josué Antonio Nescolarde Selva

Citizenship: Spanish citizen

Date of birth: 08/04/1977

ResearcherID: L-5138-2014

### Affiliation

Profesor Titular de Universidad (Tenure Professor).

Department of Applied Mathematics.

Vice Dean of Postgraduate Studies and Students. Polytechnic School.

University of Alicante, Spain.

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### Career

- Since October 2018 until now. Profesor Titular de Universidad (Tenure Professor). Department of Applied Mathematics. University of Alicante. Spain.
- From October 2012 to October 2018. Profesor Contratado Doctor (Contracted Doctor: Associate Professor). Department of Applied Mathematics. University of Alicante. Spain.
- From September 2016 to December 2016. Visiting Associate Professor. School of Mathematics and Statistics. Northeast Normal University. Changchun. China.
- From March 2016 to June 2016. Visiting Associate Professor. School of Mathematics and Statistics. Northeast Normal University. Changchun. China.
- From August 2007 to October 2012. Profesor Colaborador (Collaborator Professor). Department of Applied Mathematics. University of Alicante. Spain.
- From February 2002 to August 2007. Profesor Asociado (Lecturer). Department of Applied Mathematics. University of Alicante. Spain.

- From January 2000 to February 2002. Teaching Assistant (Ph.D. student). Department of Applied Mathematics. University of Alicante. Spain.
- From September 1998 to July 1999. Undergraduate Teaching Assistant (Undergraduate student). Department of Differential Equations. University of Havana. Cuba.

### Awards

- 2017. Researcher of the University of Alicante with the largest number of scientific publications indexed in the Web of Science (WoS) in 2015.
- 2016. Most valued professor in the degree in Telecommunication Engineering of the Polytechnic School (University of Alicante) in the academic year 2015/2016.
- 2014. Most valued professor in the degree in Telecommunication Engineering of the Polytechnic School (University of Alicante) in the academic year 2013/2014.
- 2013. Most valued professor in the degree in Telecommunication Engineering of the Polytechnic School (University of Alicante) in the academic year 2012/2013.
- 2000. PhD Scholarship in Mathematics. Secretariat for Relations with Latin America. University of Alicante. Spain.
- 1999. Gold title: B. Mathematics. University of Havana, Havana. Cuba.
- 1999. Special mention to the best academic record. B. Mathematics. University of Havana, Havana. Cuba.
- 1994. Silver Medal. National Physics Olympiad, held in Havana on May 10. Cuba.
- 1993. Bronze Medal. National Mathematics Olympiad, held in Havana on May 19. Cuba.
- 1993. Silver Medal. National Physics Olympiad, held in Havana on May 12. Cuba.

### Projects and Grants

- Since 2022(Sept) to 2025. Technological resources for intelligent viral analysis using NLP (PID2021-122263OB-C22. 213565 euros).
- Since 2019 to 2022(Sept). Behavior modeling of digital entities through human language technologies (RTI2018-094653-B-C22. 147015 euros).

- Since 2018 to 2019. Application of a methodology based on network analysis to assess the environmental quality and sustainable development of tourist destinations. (GV/2018/061. 18000 euros)
- Since 2016 to 2018. Extraction of knowledge for semantic enrichment of Digital Entities. (TIN2015-65136-C2-2-R. 115071 euros)
- Since 2016 to 2018. Finding attractors: an innovative approach to the analysis of the influence of ICT in the Spanish tourist system. (GRE15-13. 10690 euros)
- Since 2006 until 2015/2016. Systemic, Cybernetic and optimization. (VIGROB-117. 5744 euros)
- Since 2015 to 2016. Research and development strategies for inaccurate computing systems mobile cloud computing. (CETEL1-15I. 21364 euros)
- Since 2014 to 2015. Design of architectures of efficient systems processing cloud-computing. (CETEL1-14I. 27684 euros)
- Since 2013 to 2014. Design of architectures of efficient systems processing cloud-computing II. (CETEL1-13I. 29397 euros)

#### **Teaching experience**

- Since 2021/2022 until now. Extension of Statistics and Optimization. Master Degree in Data Science.
- Since 2020/2021 until now. Bayesian Graphical Methods. Master Degree in Data Science.
- From March 7, 2022 to April 1, 2022. Probabilistic Graphical Models (Online). Postgraduate course. Northwestern Polytechnical University (Xian. China).
- From June 8, 2021 to July 1, 2021. Probabilistic Graphical Models (Online). Postgraduate course. Northwestern Polytechnical University (Xian. China).
- Since 2011/2012 until now. Mathematics II: Probability and stochastic processes & Statistics, Complex variable, Partial differential equations.
- 2018/2019 until 2019/2020. Mathematics I: Calculus II and Differential Equations.
- 2010/2011 until 2016/2017. Mathematics I: Calculus II and Differential Equations.
- 2016/2017. Mathematical Statistics (School of Mathematics and Statistics. Northeast Normal University. Changchung. China)

- 2015/2016. Business Calculus (undergraduate) (School of Economy. Northeast Normal University. Changchung. China)
- 2015/2016. Biomathematics (postgraduate) (School of Mathematics and Statistics. Northeast Normal University. Changchung. China)
- 2010/2011 until 2014/2015. Basic Mathematics. Complex Numbers, Calculus I, Algebra.
- 2011/2012. Supplements for Mathematics Education. History of Mathematics. Master Degree in Secondary Education.
- 2010/2011. Mathematical Foundations III: Numerical Analysis and Probability and stochastic processes & Statistics.
- 2009/2010. Mathematics: Calculus I and Algebra.
- 2001/2002 until 2009/2010. Mathematical Foundations I: Complex Numbers, Calculus I and II, Algebra.
- 2005/2006 until 2008/2009. Mathematical Foundations II: Complex variable, Partial differential equations.
- 2000/2001 until 2008/2009. Linear Algebra and Abstract Algebra.
- 2000/2001. Fundamentals of Applied Mathematics: Calculus I and Algebra.
- 1999/2000. Extending Fundamentals of Applied Mathematics: Calculus II and Algebra.
- 1998/1999. Mathematics: Calculus II.

#### **Participation in projects for innovations in teaching**

- 2018/2019. Name of the project: Study on the situation of women in university engineering (Ministry of Health-Women's Institute 1-18i).
- Since 2013/2014 until now. Name of the project: Coordinating Network Tutorial Action Plan at the Polytechnic School. University of Alicante.
- 2014/2015. Name of the project: Coordination and monitoring of the course of Basic Mathematics and Mathematics II.
- 2013/2014. Name of the project: Coordination powers signal processing and communications Undergrade+Graduate in Telecommunication Engineering.
- 2013/2014. Name of the project: Coordination and monitoring of the course of Basic Mathematics and Mathematics II.

- 2012/2013. Name of the project: Coordination and monitoring of the course of Basic Mathematics and Mathematics II.
- 2011/2012. Name of the project: Coordination and monitoring of the course of Basic Mathematics and Mathematics II.
- 2007/2008. Name of the project: Mathematical Foundations II.
- 2007/2008. Name of the project: Linear Algebra.
- 2006/2007. Name of the project: Mathematical Foundations I.

#### **Experience with academic administration**

- Since May 2021. Vice Dean of Postgraduate Studies and Students. Polytechnic School.
- Since 2020/2021. Coordinator of the course Bayesian Graphical Methods.
- From 2019 to 2020. Director of the *Telefónica-UA* Chair: Use and Applications of Big Data.
- From May 2017 to May 2021. Vice Dean of Postgraduate Studies, Communication and Students. Polytechnic School.
- From May 2013 to May 2017. Academic Coordinator of Communication and Student. Polytechnic School. University of Alicante.
- From May 2013 to May 2017. Chief postgraduate studies. Polytechnic School. University of Alicante.
- Since 2010/2011. Coordinator of the course Mathematics II.
- From 2010/2011 to 2014/2015. Coordinator of the course Basic Mathematics.
- Since 2009/2010. Academic Coordinator of Mathematics on the University Entrance Examinations for over-25s.

#### **Areas of expertise**

Applied Mathematics: Complex systems, Data Science, Mathematical Biology, Social systems modelling.

#### **Qualifications**

2010 Ph.D. Mathematics. University of Alicante, Alicante. Spain.  
1999 B.Sc. Mathematics. University of Havana, Havana. Cuba.

#### **Experience as academic Editor and Reviewer**

- Since 2022. Associate Editor for the journal *Applied Artificial Intelligence*. Ed. Taylor and Francis.
- Since 2020. Editor for the journal *Mathematics*. Ed. MDPI.
- 2019. Associate Editor for the journal *IEEE Access*. Ed. IEEE.
- 2018. Editor Board Member for the journal *Entropy*. Ed. MDPI.
- 2018. Associate Editor for the journal *Kybernetes*. Ed. Emerald insight.
- 2018. Guest Editor: Special Issue: "Unintended Consequences". *Kybernetes*. Ed. Emerald insight.
- 2017. Guest Editor: Special Issue: "Complex Social Systems: Theory and Practice". *Systems*. Ed. MDPI.
- Since 2016. Editor for the journal *Systems*. Ed. MDPI.
- 2016. Reviewer for the journal *Minds and Machines*. Ed. Springer.
- 2016. Guest Editor: Special Issue: Belief Systems. *Foundations of Science*. Ed. Springer.
- 2015. Reviewer for the journal *Systems*. Ed. MDPI.
- Since 2015. Reviewer for the *IEEE Systems Journal*.
- 2015. Reviewer of the journal *Ecological Modelling*. Ed. Elsevier.
- 2015. Guest Editor-in-Chief: Special Issue: Belief Systems in Science and Engineering. *Cybernetics and Systems*. Ed. Taylor and Francis.
- Since 2014. Reviewer: Mathematical Reviews. American Mathematical Society (AMS).
- 2014. Reviewer of the *International Journal of Web Information Systems*.
- 2013. Reviewer of the journal *Axiomathes*. Ed. Springer.
- 2013. Reviewer of the journal *Kybernetes*. Ed. Emerald insight.
- 2011. Reviewer and Associate Editor of *The International Journal of Science in Society*. Ed. Common Ground Publishing.

## **Selected publications**

### **List of publications on Science Citation Index**

1. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Gash, H. (2022). Chance and Necessity: Hegel's Epistemological Vision. *Foundations of Science*. <https://doi.org/10.1007/s10699-022-09864-y>.
2. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2022). Processes of cellular division and fusion: system-linkage interpretation. *Cybernetics and Systems*. <https://doi.org/10.1080/01969722.2022.2090665>.

3. Usó-Doménech J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M.; Gash, H and Segura-Abad, L. (2022). Structure, thermodynamics and information in complex systems. *Kybernetes*. <https://doi.org/10.1108/K-09-2021-0858>.
4. Usó-Doménech J. L.; Nescolarde-Selva, J. A.; Gash, H. (2022). Belief systems and ideological deep disagreement. *International Journal of General Systems*. 51(7). pp. 691–733.
5. Usó-Doménech J. L.; Nescolarde-Selva, J. A.; Gash, H. (2022). Dialectical Hegelian Logic and Physical Quantity and Quality. *Foundations of Science*. 27(2). pp. 555-572.
6. Lloret-Climent, M; Nescolarde-Selva, J. A.; Alonso-Stenberg, K.; Montoyo, A.; Gutiérrez, Y. (2022). Applying Smarta to the analysis of tourist network. *Mathematical Methods in the Applied Sciences*. 45(7). pp. 3921–3932.
7. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2022). Epistemological considerations about mathematical concepts. *Kybernetes*. 51(1). pp. 95-115.
8. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2021). Paradoxical Aspects of the Russellian Conception of Existence. *Foundations of Science*. <https://doi.org/10.1007/s10699-021-09822-0>.
9. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M.; Alonso, K. and Gash, H. (2021). Utopian and dystopian ideological systems and unintended and adverse consequences. *Kybernetes*. 50(10). pp. 2850-2882.
10. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Segura-Abad, L.; Alonso-Stenerg, K.; Gash, H. (2021). Mathematical Perspectives on Liar Paradoxes. *Logica Universalis*. 15(3). pp. 251-269.
11. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Gash, H. (2021). Belief, Knowledge and Faith: A Logical Modal Theory. *Foundations of Science*. 26(2). pp. 453-474.
12. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Alonso-Stenberg, K. (2020). Reproductive system and interaction with fauna in a Mediterranean Pyrophite shrub. *Ecological Complexity*. 44, 100887.
13. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2020). Theorizing About Theories and Mathematical Existence. *Foundations of Science*. 25(3). pp. 587-595.
14. Lloret-Climent, M.; Nescolarde-Selva, J. A.; Mora-Mora, H.; Alonso-Stenberg, K.; Mollá-Sirvent, R. (2020). Modeling Complex Social Systems: A New Network Point of View in Labour Markets. *IEEE Access*. 8. pp. 92110-92119.

15. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Segura-Abad, L.; Alonso-Stenberg, K.; ; Gash, H. (2020). Solutions of extension and limits of some Cantorian paradoxes. *Mathematics*. 8(4), 486. pp. 1-11.
16. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Segura-Abad, L; Gash, H. (2020). A dialectical vision of mathematical models of complex systems. *Kybernetes*. 49(3).pp. 938-959.
17. Usó-Doménech, J. L.; Nescolarde-Selva, J.A.; Gash, H. (2020). Ontological argument and infinity in Spinoza's thought. *Foundations of Science*. 25(2). pp. 485-500.
18. Alonso-Stenberg, K; Lloret-Climent, M.; Nescolarde-Selva, J. A.; Mora-Mora, H. (2019). Interpreting the Smartphone Life Cycle Through Smarta. *IEEE Access*. 7. pp. 110730-110739.
19. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Segura-Abad, L.; Gash, H. Alonso-Stenberg, K. (2019). Cantor Paradoxes, Possible Worlds and Set Theory. *Mathematics*. 7(7), 628. pp. 1-10.
20. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Lloret-Climent, M. (2019). Impure systems and ecological models (II): components and thermodynamics. *Foundations of Science*. 24(3). pp. 427-455.
21. Usó-Doménech, J. L. Nescolarde-Selva, J. A.; Gash, H.; Segura-Abad, L. (2019). Dialectical logic for mythical and mystical superstructural systems (ii): Infinity and coincidentia oppositorum in Cusanus' thought. *Kybernetes*. 48(8). pp. 1851-1870.
22. Lloret-Climent, M.; Nescolarde-Selva, J. A.; Mora-Mora, H.; Jimeno-Morenilla, A.; Alonso-Stenberg, K. (2019). Design of Products Through the Search for the Attractor. *IEEE Access*. 7. pp. 60221- 60227.
23. Usó-Doménech, J. L.; Nescolarde-Selva, J. A. (2019). Mathematical Logic of Notions and Concepts. *Foundations of Science*. 24(4). pp. 641-655.
24. Usó-Doménech, J. L. Nescolarde-selva, J. A.; Segura-Abad, L.; Sabán, M. (2019). Dialectical logic for mythical and mystical superstructural systems. *Kybernetes*. 48(8). pp. 1653-1680.
25. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2019). Argumentum Ontologicum and Argumentum Ornithologicum: Anselm of Canterbury and Jorge Luis Borges. *Foundations of Science*. 24(4). pp. 727-749.
26. Lloret-Climent, M.; Nescolarde-Selva, J. A.; Alonso-Stenberg, K.; Selva-Barthelemy, M. (2019). Causal Analysis of the Spanish Industrial Sector Through Smarta. *IEEE Access*. 7. pp. 33556-33564.

27. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M.; Gash, H.; Alonso-Stenberg, K. (2019). Indirect Effects, Biotic Inferential Interactions and Time Functions in H-Semiotic Systems: Ecosystems Case. *Mathematics*. 7. pp. 1-24.
28. Zhou, X.; Rong, X.; Fan, M.; Nescolarde-Selva, J. A. (2019). Stoichiometric modeling of aboveground-belowground interaction of herbaceous plant. *Mathematical Biosciences and Engineering*. 16(1). pp. 25-55.
29. Nescolarde-Selva, J. A.; Gash, H.; Usó-Doménech, J. L. (2019). What are unintended and adverse consequences?. *Kybernetes*. 48(2). pp. 226 - 237.
30. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2018). Universe of Discourse and Existence. *Mathematics*. 6(11). pp. 1-19.
31. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M.; González-Franco, L.; Alonso-Stenberg, K. (2018). Spatial model of a pyrophite shrub in mediterranean terrestrial ecosystems. *Ecological Modelling*. 384 (24), pp. 333-340.
32. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; LLoret-Climent, M. (2018). Impure Systems and Ecological Models (I): Axiomatization. *Foundations of Science*. 23(2). pp 297–321.
33. LLoret-Climent, M.; Nescolarde-Selva, J. A.; Mora-Mora, H.; Signes-Pont, M. T. (2018). A new network perspective in the study of labour markets. *Mathematical Methods in the Applied Sciences*. 41(6). pp. 2261-2268.
34. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M.; González-Franco, L. (2018). Behavior of pyrophite shrubs in mediterranean terrestrial ecosystems: population and reproductive model. *Mathematical Biosciences*. 297, pp. 58-77.
35. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Belmonte-Requena, M.; Segura-Abad, L. (2017). Mathematics, Philosophical and Semantic Considerations on Infinity (II): Dialectical Vision. *Foundations of Science*. 22(3). pp. 655-674.
36. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; ; Gash, H. (2017). Structure and Superstructures in Complex Social Systems. *Systems*. 5(2), 28, pp. 1-10.
37. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; LLoret-Climent, M. (2017). Causality in Complex Systems. *Kybernetes*. 46(4). pp. 590-602.
38. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; ; Gash, H. (2017). What Are Ideological Systems? *Systems*. 5(1), 21, pp. 1-17.

39. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Segura-Abad, L. (2017). Dialectical Multivalued Logic and Probabilistic Theory. *Mathematics*. 5(1), 15, pp. 1-10.
40. Poveda-Martínez, P.; Peral-Orts, R.; Campillo-Davo, N.; Nescolarde-Selva, J. A.; LLoret-Climent, M.; Ramis-Soriano, J. (2017). Study of the effectiveness of electric vehicle warning sounds depending on the urban environment. *Applied Acoustics*. 116, pp. 317-328.
41. Alonso-Stenberg, K.; LLoret-Climent, M.; Nescolarde-Selva, J. A. (2016). Causal analysis of databases concerning electromagnetism and health. *Systems*. 4(4), 39, pp. 1-9.
42. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Segura-Abad, L. (2016). Proposal for the formalization of dialectical logic. *Mathematics*. 4(4), 69, pp. 1-11.
43. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; LLoret-Climent, M.; Meng, F. (2016). Semiotic open systems: processes and behaviours. *Complexity*. 21(S2). pp. 388-396.
44. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Lloret-Climent, M. (2016). Stability, sensitivity and uncertainty rates in the flow equations of ecological models. *Ecological Complexity*. 28. pp. 62-68.
45. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Belmonte-Requena, M. (2016). Mathematics, philosophic and semantical considerations on infinity (I): general concepts. *Foundations of Science*. 21(4). pp. 615-630.
46. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M. (2016). Complex impure systems: Sheaves, freeways, and chains. *Complexity*. 21(S1). pp. 387-400.
47. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; LLoret-Climent, M.; Meng, F. (2016). Synonymy relationship and stochastic processes in determination of flow equations in ecological models. *Ecological Complexity*. 26. pp. 79-88.
48. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; LLoret-Climent, M.; Gash, H. (2016). Semantics of language for ecosystems modelling: a model case. *Ecological Modelling*. 328. pp. 85-94.
49. Usó-Doménech, J. L.; Nescolarde-Selva J. A. (2016). What are belief systems?. *Foundations of Science*. 21(1). pp. 147-152.
50. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2016). Textual theory and complex belief systems: topological theory. *Foundations of Science*. 21(1). pp. 153-175.
51. Perez-Gonzaga, S.; Lloret-Climent, M.; Nescolarde-Selva, J. A. (2016). Invariability, orbits and fuzzy attractors. *International Journal of General Systems*. 45(1). pp. 29-40.

52. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Lloret-Climent, M. (2015). “Unintended-Effects”: A theorem for complex systems. *Complexity*. 21(2). pp. 342-354.
53. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Lloret-Climent, M. (2015). Ideological Complex Systems: Mathematical Theory. *Complexity*. 21(2). pp. 47-65.
54. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Gash, H. (2015). A logic-mathematical point of view of the truth: Reality, perception, language. *Complexity*. 20(4). pp. 58-67.
55. Lloret-Climent, M.; Pérez-Gonzaga, S.; Usó-Doménech, J. L.; Nescolarde-Selva, J. A. (2015). Fuzzy structure of complex belief systems: fuzzy relations and fuzzy belief sets. *Cybernetics and Systems*. 46(6-7). pp. 452-469.
56. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Gash, H. (2015). Belief systems and science. *Cybernetics and Systems*. 46(6-7). pp. 379-389.
57. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Gash, H. (2015). Language, values and ideology in complex human societies. *Cybernetics and Systems*. 46(6-7). pp. 390-422.
58. Usó-Doménech, J. L.; Nescolarde-Selva, J. A.; Belmonte-Requena, M.; Gash, H. (2015). Walking through Cantor’s paradise and Escher’s garden: epistemological reflections on mathematical infinite (I). *Cybernetics and Systems*. 46(6-7). pp. 423-437.
59. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Belmonte-Requena, M.; Gash, H. (2015). Walking through Cantor’s paradise and Escher’s garden: epistemological reflections on mathematical infinite (II). *Cybernetics and Systems*. 46(6-7). pp. 438-451.
60. Nescolarde-Selva, J. A.; Usó-Doménech, J. L. and Sabán, M. (2015). Linguistic knowledge of Reality: a metaphysical impossibility?. *Foundations of Science*. 20(1). pp. 27-58.
61. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Lloret-Climent, M. González-Franco, L. (2015). Chebanov law and Vakar formula in mathematical models of complex systems. *Ecological Complexity*. 21. pp. 27-33.
62. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Lloret-Climent, M. (2015). Mythical Systems: Mathematic and Logical Theory. *International Journal of General Systems*. 44(1). pp. 76-97.
63. Lloret-Climent, M.; Amorós-Jiménez, R.; González-Franco, L.; Nescolarde-Selva J. A. (2014). Coverage and invariance for the biological control of pests in mediterranean greenhouses. *Ecological Modelling*. 292. pp. 37-44.

64. Usó-Doménech, J. L. and Nescolarde-Selva, J. A. (2014). Revealing the face of Isis. *Foundations of Science*. 19 (3). pp. 311-318.
65. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2014). Myth, language and complex ideologies. *Complexity*. 20(2). pp. 63-81.
66. Nescolarde-Selva, J. A.; Usó-Doménech, J. L.; Gash, H. (2014). A theoretical point of view of Reality, Perception and Language. *Complexity*. 20 (1). pp. 27-37.
67. Lloret-Climent, M; Nescolarde-Selva, J. A.; Pérez-Gonzaga, S. (2014). Coverage and invariability in fuzzy systems. *International Journal of General Systems*, 43 (1). pp. 96-104.
68. Lloret-Climent, M, and Nescolarde-Selva, J. A. (2014). Data analysis using circular causality in networks. *Complexity*. 19 (4). pp. 15-19.
69. Nescolarde-Selva, J. A. and Usó-Domènech, J. L. (2014). Semiotic vision of ideologies. *Foundations of Science*. 19 (3). pp. 263-282.
70. Nescolarde-Selva, J. A. and Usó-Doménech, J. L.(2014). Model, metamodel and topology. *Foundations of Sciences*. 19 (3). pp. 285-288.
71. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2014). Reality, System and Impure Systems. *Foundations of Science*. 19 (3). pp. 289-306.
72. Usó-Doménech, J. L and Nescolarde-Selva, J. A. (2013). An introduction to Alysidal Algebra IV. *Kybernetes*, 42(8). pp. 1235-1247.
73. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2013). An introduction to Alysidal Algebra V: Phenomeological components. *Kybernetes*. 42(8). pp. 1248-1264.
74. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2013). Topological Structures of Complex Belief Systems (II): Textual Materialization. *Complexity*. 19 (2). pp. 50-62.
75. Nescolarde-Selva, J. A. and Usó-Doménech, J. L. (2013). Topological Structures of Complex Belief Systems. *Complexity*, 19 (1). pp. 16-62.
76. Nescolarde-Selva, J. A. and Usó-Doménech. J. L. (2012). An introduction to Alysidal Algebra III. *Kybernetes*, 41 (10). pp. 1638-1649.
77. Nescolarde-Selva, J. A.; Vives Maciá, F.; Usó-Doménech, J. L.; Berend , D. (2012). An introduction to Alysidal Algebra II. *Kybernetes*, 41(5/6). pp. 780-793.

78. Nescolarde-Selva, J. A.; Vives Maciá, F.; Usó-Doménech, J. L.; Berend , D. (2012). An introduction to Alysidal Algebra I. *Kybernetes*, 41(1/2). pp. 21-34.

### **Complete list of Publications**

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#### **Recent presentations in Congresses**

- 2020. Business Systems Laboratory International Symposium 2020. "Utopian and Dystopian Ideological Systems and Unintended and Adverses Consequences". Alicante. Spain.
- 2019. The International Society for Ecological Modelling Global Conference 2019. "A theoretical model of pollutants transport in groundwater in mediterranean ecosystems". Salzburg. Austria.
- 2019. Business Systems Laboratory International Symposium 2019. "A network analysis to evaluate tourist systems". Pavia. Italy.

- 2019. 9th International Congress on Industrial and Applied Mathematics - ICIAM 2019. "Two Paradoxes of Infinity". Valencia. Spain.
- 2019. Biennial Congress of the Royal Spanish Mathematical Society. Cantor Paradoxes and possible worlds. Santander Spain.
- 2018. Congreso Iberoamericano de Soluciones Sistémicas para la transformación de las Organizaciones. "Análisis Causal de Sectores Económicos mediante la Aplicación Smarta". Madrid. Spain
- 2018. Simposio Internacional de Métodos Matemáticos. "Cubrimiento e invariabilidad: una teoría sistémica de ecosistemas". San José. Costa Rica.
- 2018. Business Systems Laboratory International Symposium 2018. "Product Life Cycle: Coverage and Invariability". Naples. Italy.
- 2017. World Research Summit for Tourism and Hospitality. "A new network point of view in labour markets and tourism". Orlando. USA.
- 2016. Mathematical Modelling in Engineering & Human Behaviour. "Modelling social systems: a new network point of view in labour markets". Valencia. Spain.
- 2016. International Conference Computational and Mathematical Methods in Science and Engineering. "Analytical Study of Labour Markets Based on Graph Theory". Cadiz. Spain.
- 2016. EAA Euroregio. Congress on Sound and Vibration. "Detectability of electric motorcycles". Porto. Portugal.
- 2014. ICCS 2014: International Conference on Complex Systems. "A Sociocybernetics Data Analysis Using Causality in Tourism Networks". Amsterdam. Holland.
- 2013. Symposium on Cybernetics & Systems Research, Informatics, Logic, Mathematics, & Artificial Intelligence. "Ideological Systems: A Mathematical Approach". Baden Baden. Germany.
- 2010. Second International Conference on Science in society. Permission and "Prohibition in Social Systems Structure". Madrid. Spain.
- 2009. The 21th Anniversary Conference on Systems Research, Informatics and Cybernetics. "A Walford's metadynamic Point of View of Ecosustainability Ideology (II)". Baden Baden. Germany.

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#### **Recent Books**

- J.L. Usó-Domènech and J.A. Nescolarde-Selva. (2012). Mathematic and Semiotic Theory of Ideological Systems. A systemic vision of the Beliefs. LAP LAMBERT Academic Publishing. Saarbrücken. Germany. ISBN: 978-3-8443-9815-1.