YAMIR MORENO VEGA, PhD.
CURRICULUM VITAE

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EDUCATION

- PhD. in Physics (Summa Cum Laude), Department of Theoretical Physics, University of Zaragoza, Spain. From October 1997 to September 2000. Dissertation: "*Some Stochastic Models of Fracture in Heterogeneous Systems*".

- Master in Physics (Summa Cum Laude), Faculty of Physics, University of Havana, Cuba. December 1996. Dissertation: "*Criticality in Fragmentation Processes*".

- Graduation (Laurea) in Physics (Summa Cum Laude), Faculty of Physics, University of Havana, Cuba. From September 1988 to April 1993.

PROFESSIONAL EXPERIENCE

February 2014- October 2015	External Faculty Member, Complexity Science Hub Vienna, Austria.
October 2015- Present	Elected President, Complex Systems Society.
September 2015-Present	Vice-President, Network Science Society.
February 2015- Present	Deputy Director, Institute for Biocomputation and Physics of Complex Systems (BIFI), University of Zaragoza, 50018, Spain
February 2014- October 2015	Elected Vice-President, Complex Systems Society.
June 2013- Present	Board of the Network Science Society.
October 2012- Present	Elected Member of the Executive Committee and Council of the Complex Systems Society.
February 2011- January 2015	Scientific Secretary, Institute for Biocomputation and Physics of Complex Systems (BIFI), University of Zaragoza, 50018, Spain.

February 2010- Present	Research Professor of Physics, Institute for Biocomputation and Physics of Complex Systems (BIFI) & Department of Theoretical Physics, Faculty of Sciences, University of Zaragoza, 50018, Spain.
February 2005- February 2010	Ramón y Cajal Senior Research Scientist, Institute for Biocomputation and Physics of Complex Systems & Department of Theoretical Physics, Faculty of Sciences, University of Zaragoza, 50018, Spain.
February 2003- February 2005	Research Scientist, Department of Theoretical Physics & Institute for Biocomputation and Physics of Complex Systems, University of Zaragoza, Spain.
September 2000- January 2003	Postdoctoral Fellow, The Abdus Salam International Centre for Theoretical Physics Condensed Matter Group, Trieste, Italy.
September 1997- Sept. 2000	Associate Professor, Department of Physics, Technological University of Havana, Cuba.
September 1994 – August 1997	Adjunct Assistant Professor & Associate Researcher, Centre of Renewable Energetic Technologies, Havana, Cuba.
September 1994 – August 1997	Assistant Professor, Department of Physics, Technological University of Havana, Cuba.

HONORS and AWARDS

- Elected President of the Complex Systems Society. Since October 2015.

- Vice-President, Network Science Society. Since September 2015.

- Physical Review Letters Divisional Associate Editor. Since September 2014.

- Elected Vice-President of the Complex Systems Society. Since February 2014.

- Member of the Future and Emerging Technologies (FET) Advisory Group to the European Commission H2020 Research Program. Since November 2013.

- Awarded the condition of ISI Fellows (Institute for Scientific Interchange, Turin, Italy). Since June 2013.

- Board of the Network Science Society. Since June 2013.

- Advisory Board Member of the WHO Collaborative Center "Complexity Sciences for Health Systems" (CS4HS), which is based on the Division of Mathematical Modeling at the University of British Columbia Centre for Disease Control, in Vancouver, British Columbia, Canada. Since March 2013.

- Editorial Board member of the Journal of Complex Networks, Oxford University Press. Since November 2012.

- Elected member of the Executive Committee of the Complex Systems Society. Since October 2012.

- Elected member of the Council of the Complex Systems Society. Since October 2012.
- Member of the Editorial Board of Scientific Reports (NPG). Since October 2011.
- Professor at the Summer School on Statistical Physics of Complex and Small Systems, organized by the Royal Spanish Physical Society, Palma de Mallorca, Spain, 2011.
- Scientific Secretary, Institute for Biocomputation and Physics of Complex Systems (BIFI), University of Zaragoza, Spain. Since February 2011.
- Academic Editor of PLoS ONE. Since January 2011.
- ISI WoK Highly Cited Scientist (i.e, within the top 1% of most cited scientists).
- Member of the Board and Steering Committees of the Institute for Biocomputation and Physics of Complex Systems (BIFI), University of Zaragoza. Since 2007.
- Head of the Research Area: *"Complex Systems and Networks",* Institute for Biocomputation and Physics of Complex Systems (BIFI), University of Zaragoza. Since 2005.
- Outstanding American Physical Society Reviewer (2009).
- Article "Evolutionary Game Dynamics in a Growing Structured Population", *New Journal of Physics*, **11**, 083031 (2009), selected "Best of 2009" by IoP.
- Plenary Speaker for the prestigious Conference Cycles of Cosmo-Caixa. Barcelona, October 2009. Subject: Natural Selection and Evolution.
- Outstanding Europhysics Letters Reviewer (2008).
- Member of the European Physical Society.
- Member of the European Complex Systems Society.
- Ramón y Cajal Fellow, 2005-2010.
- Guest Editor for the Special Issue of the New Journal of Physics *"Complex Networked Systems: Theory and Applications".*
- Member of the Editorial Board of the Journal "Nova Scientia".
- Editor of the Journal of Complex Systems in Science (2010-).
- PhD Fellowship from the Spanish Ministry of Foreign Affairs, 1997-2000.
- 1997 Outstanding Teaching Award of the Minister for Education, Havana, Cuba.

PROFESSIONAL SERVICES

- President, Complex Systems Society. Since October 2015 [Vice-president from Feb 2014 to Sept. 2015].
- Vice-president, Network Science Society. Since September 2015.
- Chairman, International School and Conference on Network Science NetSci 2015 Zaragoza, Spain. June 1-5 2015.
- Physical Review Letters Divisional Associate Editor. Since September 2014.

- Member of the Organizing Committee of the Lake Como School on Complex Networks: Theory, Methods and Applications. First Edition held in May 2015. Second Edition held in May 2016. Third Edition in May 2017.
- Member of the Future and Emerging Technologies (FET) Advisory Group to the European Commission H2020 Research Program. 2013-
- Member of the Computational Social Sciences' Reviewer Panel for the Academy of Sciences of Finland. 2014.
- Satellite Chair of the NetSci 2014, Berkeley, California, June 2-6, 2014.
- Member of the Reviewer Panel for the selection of an IBS' (Institute for Basic Sciences) Institute Director. Seoul, Korea.
- I act regularly as Referee for more than 25 International Journals, including: *Nature, Science, Nature Physics, Proceedings of the National Academy of Sciences USA (PNAS), Physical Review Letters, Physical Review E, Mathematical Biosciences, Proceedings of the Royal Society: Biological Sciences, Europhysics Letters, BMC Genomics, BMC Bioinformatics, New Journal of Physics, Journal of Theoretical Biology, PLoS One, etc.*
- Reviewer for the Spanish Ministry of Education and Science (Project proposals and under & postgraduate fellowships).
- Reviewer for the French National Research Agency (ANR).
- Reviewer for the European Commission FP7 and H2020 Programs.
- Reviewer for The Netherlands Organization for Scientific Research (NWO).
- Reviewer for the European Commission FP6 Program.
- Referee for the European Commission in the Program: NEST PATHFINDER (Tackling Complexity in Science, 2006).
- Referee and Member of the Hearing Panel for the European Commission Call FP7-ICT-2007-3 "Science of Complex Systems for Socially Intelligent ICT".
- Co-Editor of the AIP Conference Proceedings, volume 851, (2006).
- Co-Editor of the "Handbook on Biological Networks", World Scientific, (December, 2009).

CONFERENCE ORGANIZATION AND PROGRAM COMMITTEES

- Program Committee Chair, International School and Conference on Network Science, Paris, France, Jun 11-15, 2017.
- Macfang "Mapping Complexity Foundations and Applications of Network Geometry", Barcelona, November 6 – 8, 2017
- COMPLEX NETWORKS 2017, 6th International Conference on Complex Networks and Their Applications, Lyon, France. Nov 29-Dec 1 (2017).
- CCS'17, Conference on Complex Systems 2017. Cancun, Mexico. Sept 17-22 (2017).
- Program Committee Member. SIAM Workshop on Network Science, Pennsylvania, USA. Jul 13-14 (2017).
- IC2S2 2017, 3rd International Conference on Computational Social Science, Cologne, Germany. Jul 10-13 (2017).
- NetSci 2017, International School and Conference on Network Science, Indianapolis, USA, Jun 19-23, 2017
- Program Committee Member. SIAM Workshop on Network Science, Pennsylvania, USA. Jul 13-14 (2017).

- Program Committee Member. COMPLEX NETWORKS 2016, 5th International Workshop on Complex Networks and their Applications, Milan, Italy. Nov 29-Dec 1st, 2016.
- Program Committee Member. Conference on Complex Systems, Amsterdam, The Netherlands (2016).
- Co-organizer of the 2016 CCS Satellite Meeting "Modeling of Disease Contagion Processes, 5th Edition" (together with V. Colizza and C. Poletto).
- Co-organizer of the 2015 CCS Satellite Meeting "Modeling of Disease Contagion Processes, 4th Edition" (together with V. Colizza).
- Chairman, International School and Conference on Network Science, NetSci 2015. Zaragoza, June 1-5, 2015.
- Member of the Program Committee. European Conference on Complex Systems, ECCS'14. September 22-26. Lucca, Italy, 2014.
- Co-organizer of the 2014 ECCS Satellite Meeting "Modeling of Disease Contagion Processes, 3rd Edition" (together with V. Colizza, C. Poletto, and S. Meloni).
- Satellites Chair of the NetSci 2014 Conference, Berkeley, California, June 2-6, 2014.
- Co-organizer of the 2013 ECCS Satellite Meeting "Modeling of Disease Contagion Processes" (together with V. Colizza, C. Poletto, and S. Meloni).
- Co-organizer of the 2013 NetSci Satellite Meeting "Dynamic Networks: Theory and Applications in Information and Communication Networks" (together with F. Schweitzer and Maarten van Steen).
- Member of the Program Committee of the ECCS '12 Satellite Meeting: Data-Driven Modeling of Contagion Processes - Brussels, September 5th, 2012.
- Member of the Program Committee of the WWW2012 Conference. Lyon, France. April 2012.
- Member of the Scientific Committee of the Conference NET-WORKS11, El Escorial, Madrid, Spain. 2011.
- Chairman of the International Conference: "BIFI 2010 – IV International Congress: Networks, A Framework for Cross-Disciplinary Applications", Zaragoza, Spain, 2010.
- Member of the Scientific & Organizing Committees of the Conference NET-WORKS10, University of Zaragoza. Spain. 2010.
- Member of the Program Committee of the "IEEE International Workshop COMPENG 2010 - Complexity in Engineering", Rome, Italy (Feb 22-24, 2010).
- Member of the Organizing Committee of the IV National BIFI Conference, University of Zaragoza. Spain. 2009.
- Member of the Scientific Committee of the BCNet Workshop 2008, Barcelona, Spain, December 2008.
- Member of the Scientific Committee of the Conference NET-WORKS08, University of Navarra, Spain. 2008.
- Member of the Technical Program Committee of the International Conference "BIONETICS 2007: 2nd International Conference on Bio-Inspired Models of Network, Information, and Computing Systems", Budapest, Hungary (10-13 Dec 2007).
- Member of the Scientific Committee of the Conference NET-WORKS07, University of Rey Juan Carlos, Aranjuez, Spain. 2007.
- Member of the Organizing Committee of the III National BIFI Conference, University of Zaragoza. Spain. 2007.

- Chairman of the International Conference: "BIFI 2006 – II International Congress: From Physics to Biology: The Interface between Experiment and Computation", Zaragoza, Spain.

- Member of the Organizing Committee of the Neuroscience Meeting Series (once a year, local meetings to promote the exchange of knowledge among researchers of different fields within the subject of Neuroscience, University of Zaragoza, Spain).

MAJOR INVITED AND CONTRIBUTED TALKS

- Invited Speaker, "Disease spreading processes through the lens of multilayer networks", Workshop on Advances on Epidemics in Complex Networks. Delft University of Technology, The Netherlands. August 31-September 1, 2017.
- Invited Speaker, "A data-driven model for the assessment of age-dependent patterns of Tuberculosis burden and impact evaluation of novel vaccines", Satellite "Contagion on Networks 2017" at the International School and Conference on Network Science, Indianapolis, USA, Jun 19-23, 2017.
- Invited Speaker, DOOCN Satellite at NetSci'17, "Multilayer systems: from diffusion processes to transportation networks". International School and Conference on Network Science, Indianapolis, USA, Jun 19-23, 2017.
- Invited Speaker, "Multilayer Networks in Biology: from the cellular to the population level", Satellite "Network Medicine: Quantitative interactome and multilayer networks taking medicine beyond the genome" at the International School and Conference on Network Science, Indianapolis, USA, Jun 19-23, 2017.
- Speaker, International School and Conference on Network Science, Indianapolis, USA, Jun 19-23, 2017.
- Keynote Speaker, Complex Networks 2016, 5th International Workshop on Complex Networks and their Applications, Milan, Italy. Nov 29-Dec 1st, 2016.
- Keynote Speaker, "Delving into behavioral responses when humans face social dilemmas". CCS'16 Satellite "Evolutionary Game Theory: From Biology to Social Systems". Amsterdam, Netherland. 19-22 September 2016.
- Invited Speaker, "Contagion Processes in Multilayer Networks", Complex Networks: from theory to interdisciplinary applications (a Satellite Meeting to Statphys26), July 11-13, 2016. Marseille, France.
- Keynote Speaker, "Influence of network structure in mutualistic ecosystems", Summer Solstice 2016, 8th International Conference on Discrete Models of Complex Systems, June 20-22, 2016. Aveiro, Portugal.
- Invited Speaker, "Dynamics of Interacting Diseases", Workshop on Multilayer and Interconnected Networks: Epidemic Processes and Robustness, June 8, 2016. Girona, Spain.
- Invited Speaker, "Visions for Complexity" Kick-off Meeting of the Complexity Science Hub Vienna, May 23, 2016. Vienna, Austria.
- Invited Speaker, "Use and Misuse of Networks in Biology", Symposium on Biological Information Processing, Max Planck Institute for Biological Cybernetics, April 26-29, 2016. Tubingen, Germany.
- Invited Lecturer, "Contagion Processes in Complex Multilevel Networks", ICMS/KNAW Complexity Science Winter School, December 14-18, 2015. TU Eindhoven, Netherland.
- Invited Speaker, "From small to big data: The physics of human behavior", IIASA Systems Analysis 2015, November 11-13, 2015. Vienna, Austria.
- Keynote Speaker, "Dynamics of Interacting Diseases", FISES'15 Conference, October 5-7, 2015. Badajoz, Spain.

- Keynote Speaker, "Synchronization Processes on Complex Networks", Fourth Workshop on Nonlinear Dynamics and Synchronization (INDS'15), July 30-31, 2015. Klagenfurt, Austria.
- Invited Talk, "Contagion processes on multilayer systems", Workshop Mathematics and Physics of Multilayer Complex Networks, July 6-8, 2015. MPI for the Physics of Complex Systems, Dresden, Germany.
- Keynote Speaker, "From small to Big Data", International Conference on Socio-cybernetics, June 29-30, 2015. Zaragoza, Spain.
- Invited Talk, "The Physics of Human Behavior". 25th Granada Seminar, June 15-19, 2015. Granada, Spain.
- Invited Talk, "Dynamics of Interacting Diseases". ECCS'14 Satellite Multiplex Networks 2014: Towards the understanding of a complex world. Lucca, Italy, September 23, 2014.
- Invited Talk, "Forecasting Large-scale Social Phenomena". ECCS'14 Satellite Dynamics on and of Complex Networks. Lucca, Italy, September 24, 2014.
- Invited Talk, "Recent experiments on Humans playing a Prisoner's Dilemma: age and reputation effects" Workshop on Spatial Human Cooperation: from Theory to Experiments and back, MPI for Evolutionary Biology, Plön, Germany, May 2014.
- Contributed Talk, "Dynamic Systems: From Statistical Mechanics to Engineering Applications". Zurich, Switzerland, January 2014.
- Plenary Invited Speaker at the European Conference on Complex Systems (ECCS 2013), Barcelona, Spain. September 2013.
- Invited Speaker at ECCS 2013 Satellite "Collective Contagion", Barcelona, Spain. September 2013.
- Invited Speaker at ECCS 2013 Satellite "Global Computing for our Complex Hyper-connected World", Barcelona, Spain. September 2013.
- Invited Speaker at the Second Symposium of the Institute for Basic Science "Towards a Theoretical Description of Nonlinear Dynamics in Complex Systems", Seoul, Korea. August 2013.
- Contributed talk at the "Workshop on Time-dependent and Multiplex Networks", University of Oxford, Oxford, UK. July 2013.
- ISI Fellows award from the ISI Foundation, Turin, Italy. The ceremony took place on June 27th, 2013, followed by the conference "The Being of Science" in which all ISI Fellows shared their vision with the public and gave an invited talk.
- Invited Lecturer (course "Networks: Structure and Diffusion Dynamics") at the Summer School "Emergent Dynamics of Discrete & Stochastic Multiscale Systems: analysis & simulation", TU Eindhoven, The Netherlands. June 2013.
- Invited Speaker at the Workshop "Uncertainty in Interactions Networks", Bath University, UK. June 2013.
- Invited Speaker at the Final Conference of Cyberemotions, Warsaw, Poland. January 2013.
- Invited Lecturer at the School "Complex Networks in Action", University of Catania, Catania, Italy. September 2012.
- Invited participant to the Workshop "Complex Systems Analysis: Advancing Health Systems Policy Design and Planning". Bellagio, Italy, September 2012.
- Invited Speaker at the National Conference "Nolineal 2012". University of Zaragoza, Zaragoza, Spain. June 2012.
- Keynote Speaker at "XXXIII Annual Meeting of the Neurology Society of the Basque Country", Villabuena de Álava, Spain. March 2012.

- Invited Speaker at the "V BIFI International Conference: Protein Targets, Discovery of Bioactive Compounds", Zaragoza, Spain. February 2012.
- Keynote Speaker at "Third Course on Network Science", organized by the Orange Chair at UPM, Madrid, Spain. 2011.
- Invited Speaker at "An Evolutionary Journey II", Universidad Carlos III, Madrid. 2011.
- Keynote Speaker at Workshop "Sinergia", organized by Arts Santa Monica, Barcelona, Spain. 2011.
- Keynote Speaker at Workshop "Robustness of Complex Networks", Delft, The Netherlands. 2010.
- Invited Talk, STATPHYS 2010 Satellite Meeting: New Frontiers in Complex Networks. Seoul, Korea. 2010.
- Invited Talk, Complex Energy Landscapes: Computational and Statistical Methods for Soft Matter. ZCAM, Zaragoza, Spain. 2010.
- Contributed Talk, Statistical Physics and Game Theory. Aland, Finlandia. 2009.
- Invited Talk, Complejidad: Nuevos retos en la Ciencia y la Tecnología. Universidad Rey Juan Carlos, Spain. 2009.
- Invited Talk, International Workshop "Evolution and Co-evolution". Universidad Carlos III, Madrid, Spain. 2009.
- Contributed Talk, NET-WORKS 08. Universidad de Navarra, Pamplona. 2008.
- Plenary Speaker, Non-Lineal 2008. Universidad Politécnica de Cataluña, Barcelona. 2008.
- Contributed Talk, Statistical Physics FISES 08. Universidad de Salamanca, Spain. 2008.
- Invited Talk, Bio-inspired Complex Networks in Science and Technology: From Topology to Structure and Dynamics. Max Planck Institute, Dresden, Germany. 2008.
- 2 Invited Talks, CNET-07 Workshop on Complex Networks. University of Aveiro, Aveiro, Portugal. 2007.
- Plenary Speaker, NET-WORKS-07. Universidad Rey Juan Carlos, Aranjuez, Spain. 2007.
- Contributed Talk, Non-Lineal 2007. Universidad de Castilla la Mancha, Ciudad Real. 2007.
- Invited Talk, BIOWIRE-07: Workshop on Bio-inspired design of Networks. Computer Lab, Cambridge University, UK. 2007.
- Invited Talk, Dynamics on Complex Networks and Applications. Max Planck Institute, Dresden, Germany. 2006.
- Invited Talk, Workshop on Networks and Dynamical Processes: Epidemics, Social Contacts and Percolation. University of Bath, U.K. 2005.
- Plenary Speaker, XIX Congress of Differential Equations y Applications & IX Congress of Spanish Society of Applied Mathematics. Universidad Carlos III, Madrid. 2005.
- Invited Talk, FISES-05. Madrid, Spain. 2005.
- Invited Talk, Workshop on the Structure and Function of Complex Networks. International Centre for Theoretical Physics (ICTP), Trieste, Italy. 2005.
- Contributed Talk, Workshop on Synchronization of Complex Networks. University of Barcelona, Barcelona, Spain. 2004.
- Invited Talk, *DIMACS* Working Group Meeting on Analogies between Computer Viruses and Immune Systems and Biological Viruses and Immune Systems. Rutgers University, NJ, USA. 2002.

MOST RELEVANT INVITED SEMINARS

- Multilayer networked systems: from diffusion processes to transportation networks. Seminar given at Network Science Institute, Northeastern University, Boston. June 16, 2017.
- Promoters of Human Cooperation: results from the Lab. Seminar given at Network Science Institute, Northeastern University, Boston. June 14, 2017.
- Multilayer systems: from diffusion processes to transportation networks. Seminar given at Qatar Computing Research Institute, Doha, Qatar. May 2017.
- The Physics of Human Behavior. Seminar given at the Faculty of Economics, University of Zaragoza, Zaragoza. April 15, 2016.
- Multilayer Networks. 2-hour Lesson taught to Master students at Network Science Institute, Northeastern University, Boston. November 20, 2015.
- Current topics in Complex Network Research. Informal Seminar and Discussions at Gene Stanley's Group, Boston University, November 20, 2015.
- Use and Misuse of Networks in Biology, Seminar given at Sharma Lab, Channing Division of Network Medicine, Harvard Medical School, Harvard University, Boston. November 19, 2015.
- Delving into Behavioral Responses when Humans face Social Dilemmas. Visiting Speaker at Network Science Institute, Northeastern University, Boston. November 18, 2015.
- Contagion Dynamics in Complex Networked Systems. Applied Math Seminar gave at the University of Southampton, United Kingdom, March 18, 2014.
- Diffusion processes on complex networked systems. Invited seminar given at the Department of Mathematics, Queen Mary University, London, UK. July 2013.
- Online Networks and the Diffusion of Protests. Invited seminar given at ETH Zurich, Switzerland (December 2012).
- Techno-social networks and the diffusion of collective social phenomena. Talk addressed at the "Scuola Lagrange Sistemi Complessi", ISI Foundation, Turin, Italy (July 2012).
- Online Networks and the Diffusion of Protests. Dep. of Biomedical Engineering and Computational Science (BECS), Aalto University, Espoo, Finland (April 2012).
- The 15-M Movement and the Social Media. Talk addressed to a general public at Ibercaja Zentrum, Zaragoza, 2011.
- The Dynamics of Protest Recruitment through an Online Network. Talk addressed to a general public at Cosmo-Caixa Madrid, 2011.
- Transcriptional regulatory network and epidemiology of Tuberculosis. School of Informatics, Indiana University, Bloomington, USA (November 2010).
- Complex Networks: From the Biomolecular to the Social, Faculty of Medicine, University of Zaragoza, Spain (April 2010).
- The Evolution of Evolutionary Theory, Invited Conference on Natural Selection, CosmoCaixa, Barcelona, Spain (October 2009).
- Evolutionary Dynamics on Graphs. ETH Zurich, Switzerland. (November, 2008).
- Evolutionary Game Dynamics on Networks. ISI Foundation, Turin, Italy. (August, 2008).
- Complex Networks: The Case of Epidemic Spreading. Department of Mathematics, Universidad Rey Juan Carlos, Móstoles, Madrid, Spain. (October, 2007).

- Paths to Synchronization in Complex Networks. Department of Mathematics, Bath Institute for Complexity, University of Bath, U.K. (September, 2006).
- Paths to Synchronization in Complex Networks. Complexity Research Group, BT Exact, British Telecom Laboratories, Ipswich, U.K, (August, 2006).
- The Structure of P2P Networks. Universidad Rovira i Virgili, Tarragona, Spain. (March, 2006).
- Complex Networks in Biology. Institute for Biocomputation and Physics of Complex Systems (BIFI), (April, 2005).
- Traffic Handling and Covering Problems in Communication Networks. Complexity Research Group, BT Exact, British Telecom Central Laboratories, Martlesham, Suffolk, U.K. (March, 2005).
- Dynamics of Complex Gene Expression Networks. University of Rome "La Sapienza", Rome, Italy. (February, 2004).
- Synchronization of Coupled Oscillators in Complex Networks. Donostia International Physics Center, Universidad del País Vasco, San Sebastián, Spain. (January, 2004).
- Complex Networks in Nature: Structure and Applications. Donostia International Physics Center, Universidad del País Vasco, San Sebastián, Spain. (January, 2004).
- The Use of Rumor Spreading Algorithms for Fast and Efficiency Communication in Complex Technological Networks. Complexity Research Group, BT Exact, British Telecom Central Laboratories, Martlesham, Suffolk, U.K. (August, 2003).
- Transport Process in Complex Networks. Department of Condensed Matter, Faculty of Sciences, University of Zaragoza, Spain (February, 2003).
- Resilience of Graphs with Arbitrary Degree Correlations. The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (December, 2002).

FUNDING

- *"Bridging the Gap: from Individual Behavior to the Socio-technical Man (IBSEN)"*. European Union. FET Project. 2015-2018. PI. 350.000 €.
- *"Distributed Global Financial Systems for Society (DOLFINS)"*. European Union. Project under the call FET Proactive Global Systems Science. 2015-2017. PI. 250.000 €.
- *"Nonlinear and Statistical Physics Applied to Social, Biological and Technological Systems"*. Economic and Competitiveness Ministry of Spain. 2015-2017. Co-PI. 185.000 €.
- *"Mathematical framework for multiplex networks (PLEXMATH)"*. European Union. Project 317614 under call FP7-ICT-2011-8. 2012-2015. PI. 350.000 €.
- *"Foundational Research on multilevel complex networks and systems (MULTIPLEX)"*. European Union. Project 317532 under call FP7-ICT-2011-8. 2012-2016. PI. 310.000 €.
- *"A Model for the Identification of Unique Clients and Influential Users of Mobile Phones"*. Project Granted by Applied Advanced Analytics. 2011. PI. 20.400 €.
- *"Urban Mobility at Zaragoza"*. Institute BIFI. PI. 6.400 €.
- *"Networks, Biophysics and Nonlinear Science"*. Ministry of Science and Innovation. (MICINN) Project Number: FIS2011-25167. 2012-2014. Co-PI. 259.000 €.
- *"Structure and Dynamics of Natural and Manmade Complex Systems"*. Government of Aragon, DGA. Project number FMI22/10. 2011. PI. 9.300 €.
- *"Thematic Network: Dynamics and Synchronization in Networks"*. Ministry of Science and Innovation. (MICINN) Project Number: FIS2010-09832-E. 2010-2011. PI of Zaragoza node. 12.000 €.

- *"Tackling Complexity in Physical and Biological Systems: A Computational Approach"*. Ministry of Science and Innovation. (MICINN) Project Number: FIS2009-13364-C02-01/FIS. 2010-2012. Co-PI. 86.000 €.
- *"Networks: A Framework for Cross-Disciplinary Applications". Ministry of Science and Innovation*, DGA and University of Zaragoza. 2010. PI. 9.500 €.
- COST action "Physics of Conflict and Cooperation". European Union. 2009-2011. Co-PI (representative of Zaragoza Group).
- *"Systems Biology of Mycobacterium tuberculosis PhoP: Signaling, Cellular Cycle and Epidemiological Interactions"*. DGA, Project Number: PI038/08. 2008-2010. PI. 40.000 €.
- *"Dynamics and Structure of Complex System"s*. Ministry of Science and Innovation. (MICINN) Project Number: FIS2008-01240/FIS. 2009-2011. Co-PI. 210.000 €.
- *Thematic Network: "Dynamics and Collective Phenomena in Socio-Economic Systems"*. Ministry of Science and Innovation. (MICINN) Project Number: FIS2008-01155-E/FIS. 2008-2009. Co-PI. 12.000 €.
- Grant to the Consolidated Group FENOL. Government of Aragon, (DGA). 2008-2009. Co-PI. 19.000 €.
- *"Complexity in Biological and Social Systems"*. DGICYT FIS2006-12781-C02-01. 2007-2009. Co-PI. 45000 €.
- *"Global Approach to Brain Activity (GABA)"*. European Union, NEST Pathfinder Call. 2007-2009. PI (subcontracted node). 20.000 €.
- *"Modeling Wireless Communication Networks"*. DGA (MI06/2005). 2006. PI. 9.200 €.
- *Thematic Network: "Applications of Statistical and Non-Linear Physics to Economy and Social Sciences"*. Ministry of Education and Science. (MEC). 2005-2007. Co-PI. 12.000 €.
- *"Theory and Simulation of Complex Systems 2"*. Ministry of Education and Science. MEC FIS2005-00337. 2006-2008. Co-PI. 83.000 €.
- Grant to the Consolidated Group FENOL. Government of Aragon, (DGA). 2005-2007. Co-PI. 18.000 €.
- *"Complex Networks and their Applications in Physics, Biology and Information Technologies"*. Ramón y Cajal Grant, Ministry of Education and Science. Project Number: RyC-2004-001210. PI. 8.000 €.
- *"Emergent and Cooperative Phenomena in Complex Systems between Physics and Biology"*. DGICYT FIS2004-05073-C04-01. 2005-2006. Co-PI. 40.000 €.
- *"Physical Models of Many Body Systems: Applications in Geophysics"*. DGICYT Grant (Project Number. BFM 2002-01798). 2003-2005. Co-PI. 36.000 €.

PUBLICATIONS

- My scientific production amounts to 185+ peer-reviewed publications with a total of **12445+** citations and **h-index=46** (ISI WoK, as of July 2016); and **21880**+ and **56** (Google Scholar, as of July 2016).

Relevant contributions include journals like Physics Reports, Nature Communications, Proc. Nat. Acad. Sci. USA, Phys. Rev. Lett., Phys. Rev. X, Scientific Reports, Science Advances, Phys. Rev. E, Europhys. Lett., and PLoS One. My scientific production includes the most highly cited Physics Reports in the last 10 years (**4300+ citations**). Citation record can be found at **http://www.researcherid.com/rid/A-1076-2009.**

EDITED BOOKS and BOOK CHAPTERS:

1. J. Borge-Holthoefer, Y. Moreno, and T. Yasseri (Editors)"At the Crossroads: Lessons and Challenges in Computational Social Science", *Frontiers Research Topic Ebook*, Lausanne: Frontiers Media, ISBN: 9782889450213 (2016).

2. E. Cozzo, G. F. de Arruda, F. A. Rodriguez, and Y. Moreno, "*Multilayer networks: metrics and spectral properties*", Chapter contribution to the book "Interconnected networks", edited by F. Schweitzer and A. Garas, Springer, ISBN 978-3-319-23947-7 (2016).

3. S. González-Bailón, J. Borge-Holthoefer and Y. Moreno, "*Online Networks and the Diffusion of Protest*", Chapter contribution to Analytical Sociology: Norms, Actions and Networks, 2014.

4. J. Borge-Holthoefer, S. González-Bailón, A. Rivero, and Y. Moreno, "*The Spanish Indignados Movement: Time dynamics, geographical distribution, and recruitment mechanisms*", Chapter contribution to Online Collective Action, 2014.

5. E. Cozzo, J. Sanz, and Y. Moreno, *"Dynamics of Biomolecular Networks"*. Chapter contribution to the Encyclopedia of Molecular Cell Biology and Molecular Medicine. (Edited by Robert A. Meyers), ISBN: 978-3-527-32607-5 (Wiley-VCH, Weinheim, 2012).

6. J. Poncela, J. Gomez-Gardenes, L. M. Floria, and Y. Moreno, "*Growing Networks Driven by the Evolutionary Prisoner's Dilemma Game"*. Chapter contribution to the Handbook of Optimization in Complex Networks. Springer Optimization and Its Applications, Vol. 57, Thai, My T.; Pardalos, Panos M. (Eds.) 2012.

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TEACHING EXPERIENCE

- **University of Zaragoza, Spain:**

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- "Chaos and Complex Systems", Undergraduate Course. Spring of the years 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012.

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- "Structure and Dynamics of Complex Network", Master Course within the PhD Program, 2011.

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- Pablo Echenique Robba, "A Bottom-Up Physical Approach from Small Peptides to Proteins. Methods and ab-Initio Potentials". Date of Dissertation: December 15, 2006. Mark: Summa Cum Laude. Currently he is a tenure research scientist of the Spanish National Research Council.

- Jesus Gomez-Gardenes, "Complex Systems: Nonlinearity and Structural Complexity in Spatially Extended and Discrete Systems". Date of Dissertation: December 14, 2006. Mark: Summa Cum Laude and award to the best PhD Thesis of the University of Zaragoza. Currently he is at the Institute for Biocomputation and Physics of Complex Systems at the University of Zaragoza as a Senior Ramón y Cajal Researcher.

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