

JUAN ALEJANDRO VALDIVIA

PERSONAL INFORMATION

Work Address Departamento de Física, Facultad de Ciencias
 Universidad de Chile
 Las Palmeras 3425, Ñuñoa, Santiago, Chile

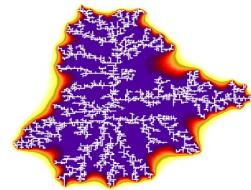
Phone (562) 9787276

Email alejo@uchile.cl

Web <http://macul.ciencias.uchile.cl/alejo>

Nationality Chilean

Birth 03/21/1969



Fractal discharge

Web of Science Researcher ID: [A-3631-2008](#)

Google Scholar: <https://scholar.google.com.co/citations?user=ii7ImRwAAAAJ&hl=en&oi=ao>

Research Gate: http://www.researchgate.net/profile/J_Valdivia

Orcid: <https://orcid.org/0000-0003-3381-9904>

EDUCATION

NASA, Goddard Space Flight Center, Greenbelt (1997 - 1999)
National Research Council Postdoctoral Fellowship

The University of Maryland, College Park (1991 - 1997)

Ph.D. in Physics (1997), Advisor: **K. Papadopoulos**

Title: The Physics of High altitude Lightning (<http://fisica.ciencias.uchile.cl/alejo>)

M.S. in Physics (1996), Advisor: **K. Papadopoulos**

The University of Maryland, College Park (1987-1991)

B. S. in Physics (Magna Cum Laude 1991)

B. S. in Mathematics (Magna Cum Laude 1991)

B. S. in Astronomy (Magna Cum Laude 1991)

RELEVANT AWARDS

1. Selected as “**Corresponding member**” of the **Chilean Academy of Science** 2023.
2. Selected as member of the “**Space Weather Expert Group**” of the **United Nations Committee on the Peaceful Uses of Outer Space** (COPUOS) in 2018
3. **CEIBA, Center of Excellence in Complex-System Research of Colombia** was selected as the “Best Excellence Research Center of 2011” by the Education Ministry of Colombia.
4. Selected as member of the group “**Ciencia de Frontera**”, of the Chilean Academy of Science (2007-2009)
5. Obtained the **1998 F. L. Scarf Award for the outstanding dissertation that contributes directly to solar-planetary science**, given by the American Geophysical Union.
6. Obtained a **National Research Council Postdoctoral Fellowship** (1997 – 1999) at NASA's Goddard Space Flight Center in Greenbelt, USA
7. Selected as **Outstanding Teacher Assistant of 1992** of the Department of Physics of the University of Maryland at College Park, USA

EXPERIENCE

1. **Departamento de Física, Facultad de Ciencias, Universidad de Chile, Chile**
Full Professor (2006 – present)
2. **Centro para el desarrollo de la Nanociencia y Nanotecnología, Cedenna, Chile**
Principal Investigator (2010 - 2024)
3. **Centro de Estudios Interdisciplinarios Básicos y Aplicados en Complejidad (CEIBA), Colombia**
International Research Fellow (2007 - 2020)
4. **Departamento de Física, Facultad de Ciencias, Universidad de los Andes, Colombia**
Associate Professor (2004 - 2006)
5. **Departamento de Física, Facultad de Ciencias, Universidad de Chile, Chile**
Associate Professor (2002 - 2006)
6. **WISER - World Institute for Space Environment Research, University of Adelaide, Australia**
Research Fellow (2002 - 2002)
7. **Departamento de Física, Facultad de Ciencias, Universidad de Chile, Chile**
Assistant Professor (2000 - 2002)
8. **NASA, Goddard Space Flight Center, Greenbelt, USA**
University Space Research Association Research Associate (1999 - 1999)
9. **NASA, Goddard Space Flight Center, Greenbelt, USA**
National Research Council Postdoctoral Fellowship (1997 - 1999)

RESEARCH INTERESTS

Space and Astrophysical Plasmas, Complex and dynamical systems, Nano and Quantum Physics, EconoPhysics, GeoPhysics, BioPhysics, Physics applied to Social Systems, Physics applied to Health System dynamics, Physics applied to Public Policy, Physics applied to Management, Space Weather Physics, Machine Learning techniques for applied and theoretical Physics

STUDENTS

1. **Ph.D Thesis: B. Toledo (2005)**, Traffic as a Complex System, Ph.D. in Physics, Universidad de Chile, Chile.
2. **Ph.D Thesis: N Lammoglia (2008)**, Modeling and simulating inequality, Ph.D in Engineering, Universidad de los Andes, Colombia.
3. **Ph.D Thesis: F. Asenjo (2010)**, New Fluid Formalisms for relativistic and quantum relativistic plasmas, Ph.D. in Physics, Universidad de Chile, Chile.
4. **Ph.D Thesis: J. Villalobos (2010)**, Chaos in Transit Systems, Ph.D in Engineering, Universidad de los Andes, Colombia.
5. **Ph.D Thesis: R. Bonilla (2011)**, Proposing a conceptual y quantitative model for the description of social systems with a Pareto behavior, Ph.D in Engineering, Universidad de los Andes, Colombia.
6. **Ph.D Thesis: P. Moya (2011)**, Acceleration and heating of minor ions in solar wind plasma, Ph.D. in Physics, Universidad de Chile, Chile.
7. **Ph.D Thesis: V. Buchelli (2013)**, The rich get richer dynamics of knowledge production: towards a science of science at the meso-level, Ph.D in Engineering, Universidad de los Andes, Colombia.
8. **Ph.D Thesis: R. Lopez (2013)**, Nonlinear waves in electron positron plasmas, Ph.D. in Physics, Universidad de Chile, Chile.
9. **Ph.D Thesis: F. Montes (2014)**, The spread of healthy behaviors in social networks through megatrends: a promising strategy for potentiating public health interventions, Ph.D in Engineering, Universidad de los Andes, Colombia.
10. **Ph.D Thesis: R. Navarro (2014)**, Thermal Fluctuations in solar wind like plasmas, Ph.D. in Physics, Universidad de Chile, Chile.
11. **Ph.D Thesis: P. Lemoine (2015)**, Towards understanding the relation between Transmilenio and walking for transportation, Ph.D in Engineering, Universidad de los Andes, Colombia.
12. **Ph.D Thesis: J. D. Meisel (2015)**, The dynamic of obesity from a systemic approach, Ph.D in Engineering, Universidad de los Andes, Colombia.
13. **Ph.D Thesis: F. Castillo (2017)**, Dynamics of magnetic fields in neutron stars, Ph.D. in Physics, Universidad de Chile, Chile.
14. **Ph.D Thesis: J. Felipe Penagos (2020)**, Perturbaciones al sistema de educación superior Colombiano (SESC) desde el componente de financiación a la demanda, Ph.D in Engineering, Universidad de los Andes, Colombia.
15. **Ph.D Thesis: S. Carrasco (2020)**, Time dependent Quantum dynamics, Ph.D. in Physics, Universidad de Chile, Chile.
16. **Ph.D Thesis: L. F. Gutiérrez (2020)**, Construcción de una representación basada en análisis formales de obras de arte, aproximando aspectos de la apreciación artística, que eventualmente pueda ser utilizada en la y evaluación de artefactos visuales. Ph.D in Engineering, Universidad de los Andes, Colombia.
17. **Ph.D Thesis: J. Clark (2022)**, Self-organization in Non-Local Dissipative Systems, Ph.D. in Physics, Universidad de Chile, Chile.
18. **Ph.D Thesis: M. Coello (2024)**, Unpredictability in pedestrian flow: emerging phenomena in one-dimensional evacuations, Ph.D. in Physics, Universidad de Chile, Chile.
19. **Ph.D Thesis: D. Leon (2025)**, Artificial intelligence and complex network-based model for seismicity analysis in the Colombian region, Ph.D. in Engineering, Universidad del Valle, Colombia.

20. **Ph.D Thesis: R. Medina (2019-Present)**, Electromagnetic fluctuations in Plasmas of electrons, protons and alphas, Ph.D. in Physics, Universidad de Chile, Chile.
21. **Ph.D Thesis: N. Dunkler (2021-Present)**, The solar wind influence on spatial patters of magnetic fluctuations, Ph.D. in Physics, Universidad de Chile, Chile.
22. **Ph.D Thesis: N. Moraga (2021-Present)**, Magneto-thermal dynamics of the neutron star core, Ph.D. in Physics, Universidad de Chile, Chile.
23. **Ph.D Thesis: C. Lagos (2023-Present)**, Thermodynamics of complex network transport, Ph.D. in Physics, Universidad de Chile, Chile.
24. **Ph.D Thesis: M. J. Quezada (2023-Present)**, Nonlinear Models of Space Weather Dynamics, Ph.D. in Physics, Universidad de Chile, Chile.
25. **Ph.D Thesis: Amelia Meyer (2024-Present)**, Complexity of bus dynamics in cities, Ph.D. in Physics, Universidad de Chile, Chile.
26. **Ph.D Thesis: Pedro Godoy (2024-Present)**, Ondas electromagnéticas en plasmas relativistas, Ph.D. in Physics, Universidad de Chile, Chile.
27. **Ph.D Thesis: Luciano Acevedo (2025-Present)**, Superficies de minima energia multidimensionales para clusters, Ph.D. in Physics, Universidad de Chile, Chile.
28. **Ph.D Thesis: Lautaro Sandoval (2025-Present)**, Dinamica de campos magneticos en Estrellas de Neutrones, Ph.D. in Physics, Universidad de Chile, Chile.
29. **Ph.D Thesis: Eduardo Guerra (2025-Present)**, Network analysis of the relation of the street network and the city traffic density, Ph.D. in Physics, Universidad de Chile, Chile.
30. **Ph.D Thesis: Adolfo Parra Cuervo (2025-Present)**, Influence of the gravitational potential of the primordial gas disk on the excitation of planetesimals captured as Jupiter Trojans via the Leaping Jupiter mechanism, Ph.D. in Modeling and Scientific Computing, Universidad de Medellin, Colombia.

31. **M.S. Thesis: L. Wastavino (2005)**, Traffic in intersections, M.S. in Physics, Universidad de Chile, Chile.
32. **M.S. Thesis: J. L. Cabal (2007)**, Fractal risk estimation in finantial portafolios, M.S. in Engineering, Universidad de los Andes, Colombia.
33. **M.S. Thesis: E. Ramos (2007)**, Stability and Noise on gene regulatory networks, M.S. in Physics, Universidad de los Andes, Colombia.
34. **M.S. Thesis: P. Muñoz (2007)**, Chaos and Nonlinear Schrodinger equation in plasmas, M.S. in Physics, Universidad de Chile, Chile.
35. **M.S. Thesis: A. Gomez (2008)**, Centrality and transport in city dynamics, M.S. in Engineering, Universidad de los Andes, Colombia.
36. **M.S. Thesis: C. Farias (2010)**, Study about the relationship between earthquakes and volcanic eruptions in Chile, in the last 100 years, M.S. in Physics, Universidad de Chile, Chile.
37. **M.S.Thesis: S. Guiller (2010)**, Transport in complex networks, M.S. in Physics, Universidad de Chile, Chile.
38. **M.S. Thesis: V. Pinto (2011)**, Studies of the turbulence in the Earth's magnetosphere using data from THEMIS and SAMBA, M.S. in Physics, Universidad de Chile, Chile.
39. **M.S. Thesis: P. Marchant (2012)**, Evolution of axially symmetric magnetic fields in neutron star crust due to the hall drift, M.S. in Physics, Pontificia Universidad Católica de Chile, Chile.

40. **M.S. Thesis: C. Armaza (2014)**, On magnetic equilibria in barotropic stars, M.S. in Physics, Pontificia Universidad Católica de Chile, Chile.
41. **M.S.Thesis: N Gallo (2017)**, Thermally induced magnetic fluctuations in the solar wind, M.S. in Physics, Universidad de Chile, Chile.
42. **M.S.Thesis: J. Figueroa (2018)**, Phase Transition of Quantum Light-Matter Systems, M.S. in Physics, Universidad de Chile, Chile.
43. **M.S.Thesis: N. Moraga (2020)**, Coupled Thermal and Magnetic Evolution of Neutron Star Cores in the Strong-Coupling Regime, M.S. in Physics, Pontificia Universidad Católica de Chile, Chile.
44. **Gabriela Yupanqui (2024)**, Evolutionary strategies with linear models for the study of Geomagnetic Storms, M.S. in Physics, Universidad de Chile, Chile.
45. **Valentina Acuña Villaflor (2024)**, Spectral index of thermally induced electromagnetic fluctuations, M.S. in Physics, Universidad de Chile, Chile.
46. **Nicolas Zuñiga (2024)**, Study of two quantum particles in ultra cold optical traps, M.S. in Physics, Universidad de Chile, Chile.

47. **Tomas Espinoza (2023-present)**, Comunicación e interferencia cuántica, M.S. in Physics, Universidad de Chile, Chile.
48. **Nicolas Moya (2022-present)**, Espectro de fluctuaciones en plasma de electrones-positrones, M.S. in Physics, Universidad de Chile, Chile.

ACCEPTED PROPOSALS

1. **Principal Investigator** (2024-2028), **Fondecyt Regular 2024 Grant** (1240697), Chile: "Universality in the kinetic regulation and the generation of electromagnetic fluctuations in space plasmas".
2. **Co-investigator** (2021-2025), **Fondecyt Regular 2021 Grant** (1211144), Chile: "Roles of Turbulent Transport and Total pressure Balance in Dynamics of Earth's Magnetosphere".

3. **Co-investigator** (2021-2025), **Fondecyt Regular 2021 Grant** (1210029), Chile: "Emotional and Motivated Responses of Health Communication: Approaching Persuasion through Behavioral Biometrics and Artificial Intelligence".
4. **Researcher** (2023-2024), **Conicyt "Programa de Financiamiento Basal 2015" Grant** (AFB220001), Chile, "Centro para el desarrollo de la Nanociencia y Nanotecnología" (CEDENNA)
5. **Senior Researcher** (2021-2024), **Agencia Nacional de Investigación y Desarrollo (ANID), Anillo Grant** (ACT210006), Chile: Research Ring on Obesity-induced accelerated aging [ObeAGE].
6. **Researcher** (2013-2020), **Colombia Center of Excellence Grant**: Center of Excellence in Complex-System Research (Centro de Estudios Interdisciplinarios Básicos y Aplicados en Complejidad, CEIBA).
7. **Researcher** (2020-2022), **Conicyt "Programa de Financiamiento Basal 2015" Grant** (AFB180001), Chile, "Centro para el desarrollo de la Nanociencia y Nanotecnología" (CEDENNA)
8. **Principal Investigator** (2020-2022), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-20-1-0189), USA: "Study the simultaneous variation of the Ionosphere, GNSS derived position accuracy, and magnetic fluctuations during storm and substorms"

9. **Principal Investigator** (2019-2022), **Fondecyt Regular 2019 Grant** (1190703), Chile: "Universality of electromagnetic fluctuations in space plasmas".
10. **Co-investigator** (2018-2019) **U-Redes Grant**, Universidad de Chile, Chile: Grupo Interdisciplinario de Investigación en Neurociencias Sociales y Comunicación"
11. **Co-investigator** (2018-2021), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-18-1-0249), USA: "Phased Array Platform for Space Applications in Cubesats"
12. **Co-investigator** (2018-2021), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-19-1-0384), USA: "Study of plasma pressure distribution in the magnetosphere during geomagnetic storms"
13. **Co-investigator** (2018-2019), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-18-1-0438), USA: "The Chilean Neuromorphic Computing Initiative"
14. **Co-Investigator** (2016-2019), **Fondecyt Regular 2016 Grant** (1161356), Chile: Equilibrium and non-equilibrium processes in space plasmas and the solar-wind-magnetosphere-ionosphere interactions
15. **Principal Investigator** (2016-2018), **Conicyt Anillo 2014 Grant** (ACT1405), Chile: Fundamental processes in space plasma physics, combining instrumentation, observations, theory, and simulations.
16. **Co-Investigator** (2016-2017), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-16-1-0384), USA: "Neuromorphic Inspired Science, Surveillance, and Reconnaissance Operations".
17. **Principal Investigator** (2015-2018), **Fondecyt Regular 2015 Grant** (1150718), Chile: City traffic dynamics.
18. **Co-investigator** (2015-2016), **Conicyt "Formación de Redes Internacionales entre Centros de Investigación" Grant** (REDES140012), Chile: "Development of Chile/UK Collaboration Network for Fusion Research" with Center for Fusion, Space and Astrophysics, University of Warwick, UK.
19. **Co-investigator** (2014-2017), **US Air Force Office of Scientific Research (AFOSR) Grant** (FA9550-14-1-0139), USA: Using the American-Chilean SAMBA magnetometer network for the study of ionospheric electrodynamics and potential impact on scintillation and radiation belt fluxes.
20. **Co-coordinator** (2013-2017), **Geospace Environment Modeling (GEM) focus group on "Geospace Systems Science"** with J. Borovsky, Bill Lotko, Vadim Uritsky
21. **Co-Investigator** (2013-2016), **Fondecyt Regular 2013 Grant** (1130273), Chile: Observation and Modeling of Complex fluxes: Ocean, Ionosphere and Astrophysical plasmas.
22. **Researcher** (2011-2013), **Collaboration Project DFG-CONICYT 2011 Grant** (DFG-06): Magnetic field of massive stars and their compact remnants
23. **Co-Investigator** (2011-2014), **Fondecyt Regular 2011 Grant** (1110729), Chile: Turbulence in Space Plasmas and its impact on the Magnetospheric Dynamics and Space Weather
24. **Principal Investigator** (2011-2014), **Fondecyt Regular 2011 Grant** (1110135), Chile: Complex dynamics in city traffic.
25. **Principal Investigator** (2010-2019), **Conicyt "Programa de Financiamiento Basal 2009" Grant** (FB0807), Chile, Centro para el desarrollo de la Nanociencia y Nanotecnología (CEDENNA)

26. **Principal Investigator** (2008-2009), **Programa de cooperación Científica Internacional CNPq/CONICYT 2007 (Folio 2007-162)**, Simulación y análisis de turbulencia en plasmas en la conexión Sol-Tierra
27. **Researcher** (2007-2011), **Colciencias "Centros de Excelencia 2007" Grant**, Colombia: Center of Excellence in Complex-System Research (Centro de Estudios Interdisciplinarios Básicos y Aplicados en Complejidad, CEIBA). Selected as the "Best Excellence Research Center of 2011" by the Education Ministry of Colombia.
28. **Principal Investigator** (2007-2010), **Fondecyt regular Grant 2007 (1070854), Chile**: Self-organization processes in plasmas, and its relevance to the earths magnetospheric dynamics
29. **Co-Investigator** (2007-2010), **Fondecyt regular Grant 2007 (1070131), Chile**: The relevance of turbulence in the magnetosphere of the earth and its relationship with geomagnetic storms and substorms
30. **Co-Investigator** (2005-2008), **Fondecyt regular Grant 2005 (1050350), Chile**: Effect of finite amplitude waves on linear waves. Ion cyclotron waves in drifting multi-ion species plasmas. Stability of a magnetoplasma with cross field currents.
31. **Principal Investigator** (2003-2006), **Fondecyt regular Grant 2003 (1030727), Chile**: The relevance of global self-organization processes in plasmas and the relationship with the dynamics of the magnetotail.
32. **Co-Investigator** (2002-2004), **Fondecyt regular Grant 2002 (1020152), Chile**: Properties and dynamics of nonlinear electromagnetic beam-plasma waves, and the stability of magnetoplasma with cross-field currents.
33. **Principal Investigator** (2000-2002), **Fondecyt regular Grant 2000 (1000808), Chile**: Modeling self-organized criticality in the turbulent plasma sheet: its relation to the coherence and repeatability of the substorm phenomena.
34. **Co-Investigator** (1998-2000), **NASA Grant 1998, USA**: The role of self-Organized Criticality in the Substorm Phenomena and its relation to Localized reconnection in the Magnetospheric Plasma Sheet.
35. **Co-Investigator** (1998-2000) , **NASA Grant 1998, USA**: Nonlinear modeling of high-latitude electrodynamics and midlatitude currents, and prediction from real-time solar wind data.

OTHER INFORMATION

| | |
|---|-------------------------------------|
| Director Departamento de Física, Facultad de Ciencias, Universidad de Chile | 2003-2004 2006-2014 2018-2020 |
| Member of "Comite de Evaluación", Facultad de Ciencias, Universidad de Chile | 2014-2018 2021-Present |
| Member of "Comite de Calificación", Facultad de Ciencias, Universidad de Chile | 2014-2018 |
| Directory member of the "Sociedad Chilena de Fisica, Sochifi" | 2008-2010 |
| Panel reviewer in Physics and Astronomy of the "Comisión Nacional de Acreditación" (Comité de área de Física y Astronomía) | 2012-Present |
| Panel reviewer in Physics and Astronomy for Fondecyt (the Chilean equivalent of the National Science Foundation) (Grupo de estudio de Física y Astronomía de Fondecyt) | 2001-2003 2012-2015 |
| Vicepresident of the "Latino American Association of Space Geophysics" (Asociación Latinoamericana de Geofísica Espacial), ALAGE | 2014-2018 |
| President of the "Latino American Association of Space Geophysics" (Asociación Latinoamericana de Geofísica Espacial), ALAGE | 2018-2021 |
| Member of the "Space Weather Expert Group" of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) | 2018-2022 |
| "Corresponding member" of the Chilean Academy of Science 2023. | 2023-Present |
| Director "Centro de Física Experimental", Facultad de Ciencias, Universidad de Chile | 2021-Present |

Journal Editor

- (2013-2015): Associate Editor of **Annals of Geophysics**
- (2020-present) Associate Editor of **Journal of Applied Nonlinear Dynamics**
- (2020-2021) Invited Editor Special issue of **Journal of Atmospheric and Solar Terrestrial Physics**
- (2021-present) Associate Editor of **Frontiers in Astronomy and Space Physics**
- (2021-present) Associate Editor of **Frontiers in Physics**
- (2022-present) Invited Editor Special issue of **Journal of Atmospheric and Solar Terrestrial Physics**

Proposal reviewer for

1. NASA, USA
2. National Science Foundation, USA
3. Natural Environment Research Council, USA
4. Comisión Nacional de Investigación Científica y Tecnológica, Conicyt/Fondecyt Chile
5. Comisión Chilena de Energía Nuclear, Chile
6. Consejo Nacional de Investigaciones Científicas y Técnicas, Conicet, Argentina
7. Agencia Nacional de Promoción Científica y Tecnológica, ANPyCT, Argentina
8. Instituto de Geofísica, Universidad Autónoma de México

9. Netherlands Organisation for Scientific Research, NWO, Netherlands
10. Mecesup (Ministerio de Education, Chile)
11. Universidad de Santiago de Chile

Paper reviewer for

1. Geophysical Research Letters
2. Journal of Geophysical Research
3. Radio Science
4. Journal of Atmospheric and Solar-Terrestrial Physics
5. Geophysical Monograph
6. Space Science Reviews
7. Advances of Space Research
8. Journal of Physics D: Applied Physics
9. Nonlinear Processes in Geophysics
10. New Journal of Physics
11. Physica A
12. Earth, Planets and Space
13. International Journal of Bifurcation and Chaos
14. Physics of Plasmas
15. Space Weather
16. Mathematical Problems in Engineering
17. The Lancet
18. Kybernetes
19. Monthly Notices of the Royal Astronomical Society
20. Entropy
21. Chaos
22. Journal of Magnetism and Magnetic Materials
23. Earth and Space Science
24. IEEE Access
25. Communications in Nonlinear Science and Numerical Simulation
26. Sustainability
27. Complexity
28. Chaos, Solitons and Fractals
29. Frontiers in Astronomy and Space Sciences

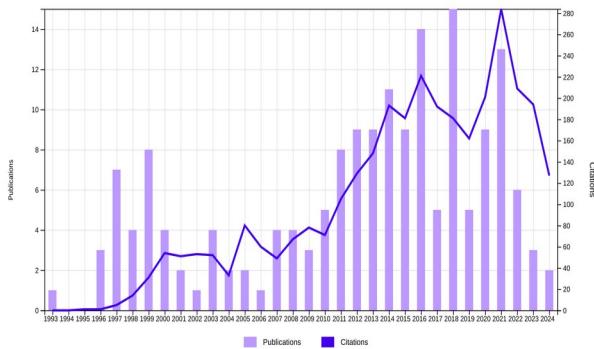
Societies

1. American Geophysical Union (AGU)
2. American Physical Society (APS)
3. Asociación Latinoamericana de Geofísica Espacial (ALAGE)
4. Sociedad Chilena de Física (Sochifi)
5. Association of Asia Pacific Physical Societies, Division of Plasma Physics(AAPPS-DPP),

Organizing and Scientific Committees

1. VI Conferencia Latinoamericana de Geofísica , Tome, Chile, October 2001
2. The XIII Simposio Chileno de Física, Concepción, Chile, November 2002
3. The 2005 World Space Environment Forum , Schloss Seggau, Austria, May 2005
4. The Physics of Solar-wind/Magnetosphere coupling , Puerto Vallarta, Mexico, November 2006
5. The Nonlinear Magnetosphere, Vina del Mar, Chile, January 2009
6. IX Colage, Punta Leona, Costa Rica, April 2011
7. Nonlinear Wave and Chaos Workshop (NWCW9), La Jolla-California, USA, March 2013
8. The Mechanics of the Magnetosphere, Torres del Paine, Chile, 2013
9. III Dynamics Days South America, Viña del Mar, Chile, November, 2014
10. Unsolved Problems in Magnetospheric Physics Workshop, Scarborough, UK, September, 2015
11. Nonlinear Wave and Chaos Workshop (NWCW10), La Jolla-California, USA, 2017
12. The Magnetosphere: New Thinking, New Tools, New results, Puerto Varas, Chile, 2017
13. "Exploring Systems-Science Techniques for the Magnetosphere-Ionosphere-Thermosphere", Los Alamos, USA, July 2018
14. "Solar and Stellar Magnetic Fields: Origins and Manifestations", Copiapo, Chile, June 2019
15. "Simposio Avances Recientes en Física de la Materia Condensada", Pucón, Chile, November 2019
16. "The Plasma Physics of the Magnetosphere", Pollenzo (CN), Italy, June, 2019
17. XII Latin American Conference on Space Geophysics (Colage 2021), Online, Chile, November, 2021
18. XIII Latin American Conference on Space Geophysics (Colage 2022), San Jose dos Campos, Brazil, November, 2022
19. XIV Latin American Conference on Space Geophysics (Colage 2024), Nuevo León, Mexico, April 2024

PUBLICATIONS

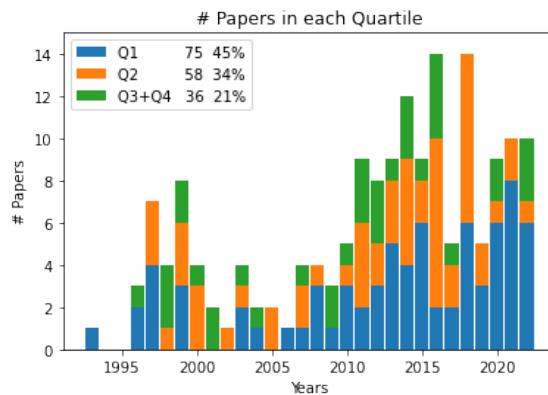


Juan Alejandro
Valdivia Hepp

Papers: 179
Number of Citations: 3330
Citations per paper: 19
H-Index: 29

(Researcher ID/Web of Science
only core collection)

Spatial Distribution of citations



1. **P. Medina, T. P. Espinoza, S. C. Carrasco, R. R. Rosa, J. Rogan, J. A. Valdivia**, Random walks over weighted complex networks: Are the most occupied nodes the nearest ones?, To be Published in Communications in Nonlinear Science and Numerical Simulation, , 108778,2025, (<https://doi.org/10.1016/j.cnsns.2025.108778>).
2. **F. Pineda, A. Rosenkranz, D. F. Zambrano, D. Guzman, F. J. Perez, M. I. Lasanta, A. Angel, F. Pala, P. Rios, R. I. Gonzalez, M. Ramirez, J. Rogan, J. A. Valdivia**, MXene-Enhanced Nanofluids for Superior Thermal Energy Storage in Concentrated Solar Power Plants, Solar Energy Materials and Solar Cells, 283, 113461,2025, (<https://doi.org/10.1016/j.solmat.2025.113461>).
3. **N. N. Encina, S. C. Carrasco, M. Ramirez, J. Rogan, J. A. Valdivia**, Unbiased evacuations processes using a reinforcement learning approach, Chaos, Solitons and Fractals, 192, 115924, 2025, (<https://doi.org/10.1016/j.chaos.2024.115924>).
4. **J. D. Meisel, V. Esguerra, C. P. Ferrer, I. Stankov, F. Montes, N. Tumas, U. Bilal, J. A. Valdivia, A. V. Diez Roux, O. L. Sarmiento**, Understanding the obesity dynamics by socioeconomic status in Colombian and Mexican cities using a system dynamics model, Heliyon, 22, e39921, 2024, (<https://doi.org/10.1016/j.heliyon.2024.e39921>).
5. **T. P. Espinoza, S. C. Carrasco, J. Rogan, J. A. Valdivia, V. S. Malinovsky**, Quantum enhancement of spoofing detection with squeezed states of light, Physical Review Research, 6, 043214, 2024, (<https://doi.org/10.1103/PhysRevResearch.6.043214>).

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PROCEEDINGS, BOOKS, GENERAL, ETC.

1. **J. Figueroa, J. Rogan, J. A. Valdivia, M. Kiwi**, G. Romero, F. Torres, Nucleation of superfluid-light domains, Proceedings Volume 10734, Quantum Nanophotonics 1073403 , 2018 (<https://doi.org/10.11117/12.2319764>)
2. **R. I. González, R. Ramírez, J. Rogan, J. A. Valdivia, F. Muñoz, F. Valencia, M. Ramírez, M. Kiwi**, Self-rolling of an aluminosilicate sheet into a single walled imogolite nanotube: The role of the hydroxyl arrangement, AIP Conf. Proc. 1702, 050004, 2015; doi: <http://dx.doi.org/10.1063/1.4938786>
3. **M. Ramírez, R. I. González, F. Muñoz, J. A. Valdivia, J. Rogan, M. Kiwi**, Time resolved imaging of Spin Transfer Vortex Oscillators, AIP Conf. Proc. 1702, 050005, 2015; doi: [10.1063/1.4938787](https://doi.org/10.1063/1.4938787)
4. **B. Toledo, J. Rogan, V. Muñoz, J. A. Valdivia**, A minimal model of city traffic: chaos, critical behavior, and control, *Recent progress in controlling chaos*, Ed. M. SanJuna and C. Grebogi, World Scientific, 267, 2010
5. **Jaime Hoyos, Andreas Reisenegger, and Juan A. Valdivia**, Multi-Fluid Simulation of the Magnetic Field Evolution in Neutron Stars, 40 YEARS OF PULSARS: Millisecond Pulsars, Magnetars and More. AIP Conference Proceedings, Vol. 983, pages 404-408, 2008
6. **J. Hoyos, A. Reisenegger, J. A. Valdivia**, Simulation of the Magnetic Field Evolution in Neutron Stars, *VI Reunion Anual Sociedad Chilena de Astronomia (SOCHIAS)*, 20, 2007.
7. **E. Ramos, J. A. Valdivia, C. Leidy, J. M. Pedraza**, The effect of noise in the transition rates between stable states in genetic circuits showing bistability, *Biophysical Journal*, 646A-647A Suppl. S, JAN 2007
8. **J. A. Valdivia, J. Rogan, V. Muñoz, L. Gomberoff, A. Klimas, D. Vassiliadis, V. Uritsky, S. Sharma, B. Toledo, L. Wastavino**, The Magnetosphere as a complex system, *Fundamentals of Space*

- Environment Research, Ed. V. Jatenco-Pereira, A. Chian, J. Valdes-Galicia, M. A. Shea, Elsevier, Vol. 1, 973, 2005.
9. **A. S. Sharma, A. Y. Ukhorskiy, M. I. Sitnov, J. A. Valdivia**, Modeling the magnetosphere using time series data, in "Disturbances in Geospace: The Storm-Substorm Relationship, Geophys. Monogr. Ser.," vol. 142, edited by A. S. Sharma, Y. Kamide and G. S. Lakhina, pp.231-241, AGU, Washington, D.C.
 10. **J. A. Valdivia**, Lightning induced optical emissions in the ionosphere, *Advances in Space Environment Research, Ed. A. Chian and the Wiser Team*, Kluwer, Vol. 1, 273, 2003.
 11. **J. A. Valdivia, A. Klimas, D. Vassiliadis, V. Uritsky, J. Takalo**, Self-organization in a current sheet model, *Advances in Space Environment Research, Ed. A. Chian and the Wiser Team*, Kluwer, Vol. 1, 515, 2003.
 12. **L. Gomberoff, K. Gomberoff, V. Muñoz, J. A. Valdivia**, Excitation and parametric decays of electron/ion whistler waves, *Plasma Physics American Institute of Physics Conference Proceedings*, 563, p. 123, 2001.
 13. **A. J. Klimas, V. Uritsky, J. Valdivia, D. Vassiliadis, D. Baker**, On the compatibility of the coherent substorm cycle with the complex plasma sheet, *Proceedings of the 5th International conference on Substorms*, p. 165, 2000
 14. **S. Sharma, J. A. Valdivia, R. Rosa**, Spatiotemporal Dynamics Using Time Series Data: Nonlinear Dynamics of the Magnetosphere, *Nonlinear Dynamics and Computational Physics*, edited by V. Sheorey, Narosa Publishing House, p. 201, 1999
 15. **J. A. Valdivia**, Rayos, Truenos y Relámpagos, *Ciencia al dia*, Vol 2, Enero 1999, <http://www.ciencia.cl/CienciaAlDia/>
 16. **J. A. Valdivia**, ¿Se puede regenerar la capa de ozono mediante una explosión atómica?, *Ciencia al dia*, Vol 2, Septiembre 1999, <http://www.ciencia.cl/CienciaAlDia/>
 17. **J. A. Valdivia, D. Vassiliadis, A. Klimas, A. S. Sharma**, The electrojet currents: understanding their spatiotemporal multivariate properties, *Proceedings of the 4th International conference on Substorms*, p. 669, 1998.
 18. **R. R. Rosa, C. Rodrigues Neto, F. M. Ramos, A. S. Sharma, J. A. Valdivia**, Computational Operators for Dynamical Complex Pattern Recognition, *Modelling Collective Phenomena in Complex Systems*, 22F, p. 304, 1998. Published by European Phys. Soc.
 19. **D. Vassiliadis, J. A. Valdivia, A. Klimas, D. N. Baker**, Substorms expansion as seen from the ground: models of the geomagnetic signature, *Proceedings of the 4th International conference on Substorms*, p. 73, 1998.
 20. **S. Sharma, J. A. Valdivia, Y. Kamide**, Dynamical relationship between storms and substorms, *Proceedings of the 4th International conference on Substorms*, p. 737, 1998.
 21. **A. J. Klimas, J. Valdivia, D. Vassiliadis, D. Baker**, AL prediction using data-derived nonlinear prediction filters, *Proceedings of the 1998 Cambridge Symposium Workshop on Multiscale Phenomena in Space Plasma II*, p. 215, 1998.

22. **J. Valdivia, G. Milikh**, Fractal antennae, red sprites and gamma ray bursts, Proceedings of the 1998 Cambridge Symposium Workshop on Multiscale Phenomena in Space Plasma II, p. 429, 1998.
23. **J A. Valdivia, G. Milikh, K. Papadopoulos**, Ionospheric Modification by Lightning: Lightning as a fractal Antenna, Summary of Presentations: High power RF Ionospheric Modification Workshop, p. 363, 1996
24. **K. Papadopoulos, G. Milikh, J. A. Valdivia**, Runaway Breakdown in the Presence of Magnetic Fields, Proceedings of Air Force Office of Scientific Research and Phillips Laboratory, Workshop on Sprites and Blue Jets, p. 305, 1995
25. **G. Milikh, K. Papadopoulos, J. A. Valdivia**, On the Structure of the Red Sprites: Lightning as a Fractal Antenna, Proceedings of Air Force Office of Scientific Research and Phillips Laboratory, Workshop on Sprites and Blue Jets, p. 317, 1995
26. **S. Sharma, J. A. Valdivia**, Low Dimensional Dynamics and Prediction of Substorms, *Proceedings of the 2nd International conference on Substorms*, p. 467, 1994

CONFERENCES

* means at least one invited presentation

2025 (January) 17th Latin American Workshop on Plasma Physics, Santiago, Chile

2024 (December) Quantum Optics X, Puerto Varas, Chile

2024 (November) XIX meeting of the Sociedad Chilena de Astronomia. Arica, Chile

2024 (November) XXIV Simposio Chileno de Fisica, Temuco, Chile

2024*(October) The Americas Scales Workshop (online), Washington DC, USA

2024*(October) The Americas Space Weather as a Global Challenge (online), Washington DC, USA

2024*(October) XX Workshop on Instabilities and Nonequilibrium Structures, Nize, France

2024 (September) 21st International Congress on Plasma Physics, Ghent, Belgium

2024 (April) XIV Latinoamerican conference on space geophysics, Monterrey, Mexico

2024 (February) 63th SANIBEL Symposium, Floridad, USA

2023*(December) XIX Instabilities and Nonequilibrium Structures, Valparaiso, Chile

2023 (October) Conference on Complex Systems 2023, Bahia, Brazil,

2023*(October) Space Weather Observations throughout Latinoamerica, Ushuaia, Argentina

2023 (March) XVIII meeting of the Sociedad Chilena de Astronomia, Temuco, Chile

2022*(December) "Avances Recientes en Física de la Materia Condensada, Puerto Varas, Chile

2022*(November) XIII Latinoamerican conference on space geophysics, San Jose dos Campos. Brasil

2022 (November) XXIII archSimposio Chileno de Fisica, Valparaiso, Chile

2022*(October) 6th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP), Online, Japan

2022 (July) Cospar 22nd Scientific Assembly, Athens, Greece

2022 (May) Pharos The multi-messenger physics and astrophysics of neutron stars", Rome, Italy

2022 (January) XVII meeting of the Sociedad Chilena de Astronomia, Online, Chile

2021*(December) Workshop en Investigation Computational, Santiago, Chile

2021 (December) Fall Meeting American Geophysical Union, USA

2021*(December) XVIII Instabilities and Nonequilibrium Structures 2021,Valparaiso, Chile

2021 (November) The 10th International Conference on Complex Networks and their Applications, Spain

2021*(October) Workshop on Sociophysics: Social Phenomena from a Physics Perspective, Online, Brazil

2021*(August) Solar wind–Magnetosphere Interaction Workshop, Online, USA

2021 (July) 17th International Conference on Urban Health, Online, USA

2021*(May)Applications of Statistical Methods and Machine Learning in the Space Sciences, Online, USA

2021 (May) Complex net live 2021, Online, UK

2021 (April) OBA Stars: Variability and Magnetic Fields", St. Petersburg, Russia

2021 (April) European Geophysical Union General Assembly 2021, Online, EU

2021 (April) Am, Online, American Physical Society April Meeting Quarks to Cosmos, Online, USA

2021 (January) 101st Annual Meeting of the American Meteorological Society, USA
2021 (January) 43rd Cospar Scientific Assembly, Sydney, Australia

2020 (December) XVI Meeting of the Chilean Astronomical Society, Chile
2020 (November) XXI I Simposio Chileno de Física, Antofagasta, Chile
2020*(September) PrExDA: Predicting Extremes by Data-Driven Analytic, USA
2020*(September) Workshop on Machine Learning, data Mining and data Assimilation in Geospace, USA
2020 (March) International Conference on Complex Networks, Exeter, UK
2020 (March) The multi-messenger physics and astrophysics of neutron stars PHAROS, Patras,Greece

2019*(December) XVII Instabilities and Nonequilibrium Structures 2019, Valparaiso, Chile
2019 (December) International Conference "Dynamical Systems – Theory and Applications", Lodz, Poland
2019 (December) Complex Network 2019, Lisbon, Portugal
2019 (November) LARIM 2019: XVI Latin American Regional IAU Meeting, Antofagasta, Chile
2019 (September) Conference on Complex Systems 2019, Singapore, Singapore
2019 (August) Latin American Conference on Complex Networks, Cartagena, Colombia
2019*(July) Asia Oceania Geosciences Society 16th Annual Meeting, Singapore
2019*(June) The Plasma Physics of the Magnetosphere, Pollenzo, Italy
2019 (March) Space weather workshop 2019, Boulder, USA
2019*(March) Conference of Computational Interdisciplinary Science, CCIS 2019, Atlanta, USA
2019*(February) Reunion of the Expert Group on Space Weather of the United Nations, Vienna, Austria

2018*(December) XX Conference Nonequilibrium Stat. Mech. and Nonlinear Systems, Santiago, Chile
2018 (December) The 7th International Conference on Complex Networks Applications,Cambridge, UK
2018 (December) American Geophysical Union Fall Meeting, Washington DC, USA
2018 (November) Dynamics Days Latin America and the Caribbean, Punta del Este, Uruguay
2018 (November) XXI Simposio Chileno de Física, Antofagasta, Chile
2018*(November) Simposio Avances Recientes en Física de la Materia Condensada, Pucón, Chile
2018 (November) Simposio de Nanotecnologia, Santiago, Chile
2018 (September) Space Weather Science Towards Improved Forecasting COSPAR, Sao Jose, Brasil
2018 (July) 22nd World Multi-Conference on Systemics, Cybernetics and Informatics, Orlando, USA
2018 (July) 2018 International Conference on Magnetism, San Francisco, USA
2018 (July) 42nd COSPAR Scientific Assembly, Pasadena, USA
2018 (June) International School and Conference on Network Sciences (NetSci 2018), Paris, France
2018 (March) Chapman Conference on Particle Dynamics in the Earth's Radiation Belts, Cascais, Portugal

2017*(November) The Magnetosphere: New tools, New Thinking, New results, Puerto Varas, Chile
2017 (November) XV Latin American Workshop on Nonlinear Phenomena (LAWNP), La Serena, Chile
2017*(October) Imogolite 2017, Puerto Varas, Chile
2017*(September) Space Weather: A Multi-Disciplinary Approach, Leiden, Netherlands
2017 (June) International School and Conference on Network Science, Indiana, USA

2017*(May) Advancing Plasma Physics from the Sun to the Earth, Breckinridge, USA
2017 (April) 8th International Conf. on Frontiers of Plasma Physics and Technology, Valparaiso, Chile
2017*(March) Nonlinear wave and chaos workshop (NWCW-10), La Jolla, USA

2016 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2016 (November) IX Seminario Intensivo de materia condensada y Fisica estadistica, Pucon, Chile
2015 (November) XX Simposio Chileno de Física, Santiago, Chile
2016 (October) Global modelling of the space weather chain, Espoo, Finland
2016 (October) XV Latin American Regional IAU Meeting 2016, Cartagena, Colombia
2016 (August) Symposium: Molecular dynamics of materials from assembly to fracture, Philadelphia, USA
2016 (July) 41st COSPAR Scientific Assembly, Istanbul, Turkey,
2016*(Julio) Summer School: Conectando a los mejores para la Educación, Bogota, Colombia
2016 (June) 18th International Congress on Plasma Physics (ICPP 2016), Kaohsiung, Taiwan

2015*(December) XIV Instabilities and Nonequilibrium Structures, Viña del Mar, Chile
2015 (November) 22nd Latin American Symposium on Solid State Physic, Puerto Varas, Chile
2015*(September) Mechanics of the Magnetosphere, Scarborough, United Kingdom
2015 (September) VII Chile-Mexico Workshop on Magnetism, Nanoscience and Applications, Arica, Chile
2015 (September) Graphita 2015, Bologna, Italy
2015 (August) LAMMPS Users' Workshop and Symposium, Albuquerque, New Mexico, USA.
2015 (August) 12th Annual Asia Oceania Geosciences Society Meeting, Singapore
2015 (June) GEM 2015 Summer Workshop, Snowmass, USA
2015*(June) Peace Construction from Interdisciplinary Focus, Bogota, Colombia
2015 (May) Joint Assembly of the American Geophysical Union, Montreal, Canada
2015 (March) XII annual meeting of the Chilean Astronomical Society (SOCHIAS), Puerto Varas, Chile

2014 (November) XIX Simposio Chileno de Fisica 2014, Concepcion, Chile
2014*(November) III Dynamics Days South America, Vina del mar, Chile
2014 (September) 17th International Congress on Plasma Physics (ICPP 2014), Lisbon, Portugal,
2014 (September) SCOSTEP/ISWI International Space Science School (ISSS), Lima, Peru
2014*(September) 10th Latin American Conference on Space Geophysics, Cuzco, Peru
2014 (July) Pan American Materials Conference 2014, Sao Paulo, Brasil
2014 (January) 15th Latin-American Workshop on Plasma Physics (LAWPP), San José, Costa Rica

2013 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2013*(December) 14th Workshop on instabilities and nonequiibrium structures, Vina del mar, Chile
2013*(November) Santa Fe institute Complex System Summer School Chile, Zapallar, Chile
2013*(October) Mechanics of the Magnetosphere, Torres del Paine, Chile
2013 (September) 6th International conference on fractals and dynamic system in geoscience, Perugia, Italy
2013 (August) Magnetic Fields Through Stellar Evolution, Biarritz, France

2013 (July) 14th International Society of Scientometrics and Infometrics Conference, Viena, Austria
2013 (June) Nanoscience Conference, Easter Island, Chile
2013*(March) Nonlinear wave and chaos workshop (NWCW-9), La Jolla, USA
2013 (February) Magnetic Fields in the Universe IV, Playa del Carmen, Mexico

2012 (December) 26th Texas Symposium on Relativistic Astrophysics, Sao Paulo, Brazil
2012*(December) XVIII Conference on Non Equil. Stat. Mech. and Non. Physics, Santiago, Chile
2012 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2012 (November) XVIII Simposio Chileno de Física, La Serena, Chile
2012 (November) Dynamic Days South America 2012, Cartagena, Colombia
2012 (October) Sochias 2012, Vina del Mar, Chile
2012 (July) 39th COSPAR Scientific Assembly, Mysore, India
2012 (July) International Congress on Plasma Physics, Stockholm, Sweden,
2012 (July) Compstar: The physics and astrophysics of compact objects, Papeete, French Polynesia
2012 (May) Magnetic fields in Massive Stars and their Compact remnants, Santiago, Chile
2012 (January) Workshop on Stellar Magnetism and Neutron Stars, Santiago, Chile

2011 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2011 (November) XIV Latin-American Workshop on Plasma Physics (LAWPP), Mar del Plata, Argentina
2011 (November) Solidos 2011, San Miguel de Tucumán, Argentina
2011 (June) International Astrophysics Forum Alpbach, IAFA 2011, Tirol, Austria
2011*(April) Advanced School of Space Environment, Punta Leona, Puntarenas, Costa Rica
2011*(April) IX COLAGE, Punta Leona, Puntarenas, Costa Rica

2010 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2010 (November) XVII Simposio Chileno de Física, Pucon, Chile
2010 (September) XXX Dynamics Days Europe, Bristol, United Kingdom
2010 (August) The Meeting of the Americas, American Geophysical Union, Foz de Iguacu, Brasil
2010 (August) International Congress on Plasma Physics, Santiago, Chile
2010 (August) Latinoamerican Workshop in Plasmas LAWP, Santiago, Chile
2010 (July) Dynamics Days South America 2010, Sao Jose dos Campos, Brasil
2010 (June) 6th International Conference on Theory and Molecular Clusters, Mexico City, Mexico
2010 (May) II Congreso Int. de Formacion y Modelacion en Ciencias Basicas, Medellin, Colombia

2009 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
2009 (December) 12th workshop on instabilities and non equilibrium structures., Vina del Mar, Chile
2009 (November) Solidos 2009, Valparaiso, Chile
2009 (October) International Living With a Star 2009, Ubatuba, Sao Paulo, Brasil
2009 (July) The 9th International School for Space Simulations, Paris. France.
2009 (June) Modern Challenges in Nonlinear Plasma Physics, Halkidiki, Greece
2009*(January) The Nonlinear Magnetosphere, Viña del Mar, Chile

2009 (January) Latin American School on Computational Materials Science, Santiago Chile.

2008 (November) XVI Simposio Chileno de Fisica de la Sociedad Chilena de Física, Valparaíso, Chile.

2008 (October) Informs Annual Meeting. Washington D.C, USA

2007*(November) 50a Reunión Anual de la Soc. de Biología. de Chile, Pucon, Chile

2007*(October) The World Space Environment Forum 2007, Bibliotheca Alexandrina, Egypt

2007 (August) 40 Years of Pulsars, McGill, Montreal, Canada

2007 (July) 4th annual meeting of the Asia Oceania Geoscience Society, Bangkok, Thailand

2007 (July) Dynamics Days Europe 2007, Loughborough University, England

2007 (June) PASI 2007 Electronic Structure and Excitations on Nanostructures, Zacatecas, Mexico

2007 (March) 51st Annual Meeting of the Biological Society, Baltimore, USA

2007 (March) American Physical Society, March Meeting, Denver, USA

2006 (December) XXIII Texas Symposium on Relativistic Astrophysics, Melbourne, Australia

2006 (November) 5ta Reunion Anual de la Sociedad Chile de Astronomia, La Serena, Chile

2006 (November) XV Reunion de la Sociedad Chilena de Fisica, Santiago, Chile

2006 (August) V Jornada de Mecánica Computacional, Concepcion, Chile

2005 (September) 2005 Complexity, Science & Society Conference, Liverpool, England

2005 (June) Workshop on Economic Heterogeneous Interacting Agents, WEHIA 2005, Essex, England

2005 (May) World Space Environment Forum - WSEF2005, Schloss Seggau, Austria

2004*(March) First Latin American Advanced School on Space Environment, Brasil

2003 (December), Fall Meeting American Geophysical Union, San Francisco, CA, USA

2002 (July), International Conference on Plasma Physics 2002, Sydney Australia

2002*(July) World Space Environment Forum - WSEF2002 Adelaide, Australia

2002*(July) Workshop on High Performance Computing in Space Environment Research - Adelaide, Australia

2001 (December), Fall Meeting American Geophysical Union, San Francisco, CA, USA

2001*(October) VI Conferencia Latinoamericana de Geofisica Espacial, Tome, Chile

2001 (May) Spring American Geophysical Union Meeting, USA

2000 December, Fall Meeting American Geophysical Union, San Francisco, CA, USA

2000 (November) XII Simposio Chileno de Física, Santiago, Chile

1999 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA

1999 (July) International Union of Geodesy and Geophysics (IUGG), Birmingham, England

1999 (May) Spring Meeting American Geophysical Union, USA

- 1999 (March) ISTP Science Workshop, Greenbelt, MD, USA
1999, (January) The National Radio Science Meeting, Boulder, CO, USA
- 1998 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1998*(June) Cambridge Symposium Workshop on Physics of Space Plasmas, Cascais, Portugal
1998 (May) Spring Meeting American Geophysical Union, USA
1998 (March) ICS-4 Substorm conference, Hamamatsu, Japan
- 1997*(December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1997 (November) ISTP Science Workshop, Greenbelt, MD, USA
1997 (May) Spring Meeting American Geophysical Union, USA
1997 (April) GEM Workshops, Snowmass, CO, USA
- 1996 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1996 (May) Spring Meeting American Geophysical Union, USA
1996 (April) Ionospheric modification Workshop, Santa Fe, NM, USA
1996 (January) Dynamic Days, USA
- 1995 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1995 (June) International Workshop on Measures of Spatio-Temporal Dynamics, Bryn Mawr, PA, USA
1995 (May) Spring Meeting American Geophysical Union, USA
- 1994 (May) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1994 (November) American Physical Society, Division of Plasma Physics, USA
1994 (December) Spring Meeting American Geophysical Union, USA
- 1993 (December) Fall Meeting American Geophysical Union, San Francisco, CA, USA
1993 (November) American Physical Society, Division of Plasma Physics, USA