



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



ENRIQUE CRISTIAN VAZQUEZ SEMADENI

Datos Generales

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Nombramientos

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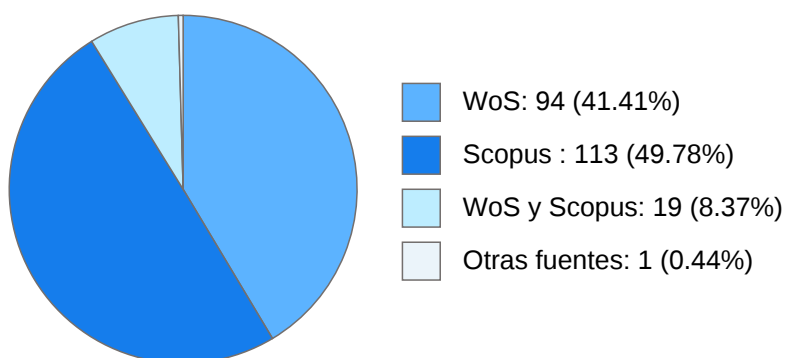
Estímulos, programas, premios y reconocimientos

SNI III 2009 - VIGENTE
SNI II 2008
PRIDE D 2017 - 2024
PRIDE C 2014 - 2017
PRIDE Fijo 2014
PRIDE C 2014
PRIDE Fijo 2014
PRIDE C 2012 - 2013
PRIDE D 2012
PRIDE C 2012
PRIDE D - 2012
PUN Investigación en ciencias exactas 2021

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	The role of shocks and the velocity gradient in the relative orientation of the magnetic field and dense gas clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES Guido Granda-Munoz	ASTRONOMY & ASTROPHYSICS	2025
2	A Neutral Hydrogen Absorption Study of Cold Gas in the Outskirts of the Magellanic Clouds Using the GASKAP-H i Survey	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Chen H. Stanimirovic S. et al.	ASTRONOMICAL JOURNAL	2025
3	The ALMA-QUARKS Survey: Detection of Two Extremely Dense Substructures in a Massive Prestellar Core	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL LETTERS	2024
4	The ALMA Survey of Star Formation and Evolution in Massive Protoclusters with Blue Profiles (ASSEMBLE): Core Growth, Cluster Contraction, and Primordial Mass Segregation	AINA PALAU PUIGVERT GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES	2024
5	Multiscale accretion in dense cloud cores and the delayed formation of massive stars	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES ALEJANDRO GONZALEZ SAMANIEGO	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

6	On the properties and implications of collapse-driven MHD turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Hu Y. Xu S. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
7	Direct Observational Evidence of Multi-epoch Massive Star Formation in G24.47+0.49	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Anindya Saha Anandmayee Tej et al.	ASTROPHYSICAL JOURNAL LETTERS	2024
8	ATOMS: ALMA three-millimetre observations of massive star-forming regions?XVII. High-mass star-formation through a large-scale collapse in IRAS 15394-5358	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
9	ATOMS: ALMA Three-millimeter Observations of Massive Star-forming regions ? XV. Steady accretion from global collapse to core feeding in massive hub-filament system SDC335	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Xu F.-W. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2023
10	Simulated Observations of Star Formation Regions: Infrared Evolution of Globally Collapsing Clouds	ROBERTO JOSE GALVAN MADRID JACOPO FRITZ GUSTAVO RAMON BRUZUAL ALFONZO et al.	ASTROPHYSICAL JOURNAL	2023
11	The kinetic and magnetic energy budget of hub-filament systems during the gravitational fragmentation of molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT Camacho V. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2023
12	Direct Observational Evidence of the Multi-scale, Dynamical Mass Accretion Toward a High-mass Star-forming Hub-filament System	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL	2023
13	High-resolution APEX/LAsMA (CO)-C-12 and (CO)-C-13 (3-2) observation of the G333 giant molecular cloud complex I. Evidence for gravitational acceleration in hub-filament systems	ENRIQUE CRISTIAN VAZQUEZ SEMADENI J. W. Zhou F. Wyrowski et al.	ASTRONOMY & ASTROPHYSICS	2023
14	ATOMS: ALMA three-millimeter observations of massive star-forming regions - XIII. Ongoing triggered star formation within clump-fed scenario found in the massive (similar to 1500 M-circle dot) clump	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Siju Zhang Ke Wang et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2023

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

15	A resolution criterion based on characteristic time-scales for MHD simulations of molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES Granda-Muñoz G. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2022
16	Gravity-driven filamentary flow in molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI ROBERT JOHN LOUGHNANE Naranjo-Romero R.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2022
17	ATOMS: ALMA Three-millimeter Observations of Massive Star-forming regions - XI. From inflow to infall in hub-filament systems	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Jian-Wen Zhou et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2022
18	Density profile evolution during prestellar core collapse: collapse starts at the large scale	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2021
19	Simultaneous Evolution of the Virial Parameter and Star Formation Rate in Molecular Clumps Undergoing Global Hierarchical Collapse	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT Vianey Camacho et al.	ASTROPHYSICAL JOURNAL	2020
20	Nonadiabatic Turbulence Driving during Gravitational Collapse	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Ruben Guerrero-Gamboa	ASTROPHYSICAL JOURNAL	2020
21	The effect of photoionizing feedback on the shaping of hierarchically-forming stellar clusters	ALEJANDRO GONZALEZ SAMANIEGO ENRIQUE CRISTIAN VAZQUEZ SEMADENI	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2020
22	The Molecular Cloud Lifecycle	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Chevance M. et al.	SPACE SCIENCE REVIEWS	2020
23	The Physics of Star Cluster Formation and Evolution	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Martin G. H. Krause et al.	SPACE SCIENCE REVIEWS	2020
24	From Diffuse Gas to Dense Molecular Cloud Cores	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Philippe Andre et al.	SPACE SCIENCE REVIEWS	2020

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

25	Erratum: Gravity or turbulence? – IV. Collapsing cores in out of virial disguise (Monthly Notices of the Royal Astronomical Society (2018) 479 (2112) DOI: 10.1093/mnras/sty1515)	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
26	Structure and expansion law of H II regions in structured molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI RICARDO FRANCISCO GONZALEZ DOMINGUEZ JOSE FRANCO AGUILAR et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
27	Global hierarchical collapse in molecular clouds. Towards a comprehensive scenario	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT JAVIER BALLESTEROS PAREDES et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
28	Molecular cloud evolution – VI. Measuring cloud ages	ENRIQUE CRISTIAN VAZQUEZ SEMADENI ROBERTO JOSE GALVAN MADRID Zamora-Avilés M. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2018
29	Gravity or turbulence? – IV. Collapsing cores in out-of-virial disguise	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2018
30	Challenges and Techniques for Simulating Line Emission	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Olsen K.P. Pallottini A. et al.	Galaxies	2018
31	The magnetic field structure in molecular cloud filaments	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Manuel Zamora-Aviles	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2018
32	Magnetic suppression of turbulence and the star formation activity of molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Manuel Zamora-Aviles Bastian Koertgen et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2018
33	Partially Ionized Plasmas in Astrophysics	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Ballester J.L. Alexeev I. et al.	SPACE SCIENCE REVIEWS	2018

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

34	Hierarchical star cluster assembly in globally collapsing molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI PEDRO COLIN ALMAZAN Gonzalez-Samaniego, Alejandro	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2017
35	Hierarchical star cluster assembly in globally collapsing molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI ALEJANDRO GONZALEZ SAMANIEGO PEDRO COLIN ALMAZAN	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2017
36	Erratum to Molecular cloud formation as seen in synthetic HI and molecular gas observations	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Heiner, Jonathan S.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2016
37	Supernova feedback in molecular clouds: Global evolution and dynamics	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Koertgen, Bastian Seifried, Daniel et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2016
38	ENERGY BUDGET OF FORMING CLUMPS IN NUMERICAL SIMULATIONS OF COLLAPSING CLOUDS	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Camacho, Vianey et al.	ASTROPHYSICAL JOURNAL	2016
39	Inverse hubble flows in molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI PEDRO COLIN ALMAZAN GILBERTO CARLOS GOMEZ REYES et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015
40	ERRATUM: "THE FREE-FALL TIME OF FINITE SHEETS AND FILAMENTS" (2012, ApJ, 744, 190)	Jesus A. Toala ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES	ASTROPHYSICAL JOURNAL	2015
41	Molecular cloud formation as seen in synthetic HI and molecular gas observations	Jonathan S. Heiner ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015
42	Gravity or turbulence? - III. Evidence of pure thermal Jeans fragmentation at ~0.1 pc scale	AINA PALAU PUIGVERT JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

43	Hierarchical gravitational fragmentation. I. Collapsing cores within collapsing clouds	Raul NaranjoRomero ENRIQUE CRISTIAN VAZQUEZ SEMADENI Robert M. Loughnane	ASTROPHYSICAL JOURNAL	2015
44	Foreword	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Falgarone E. Elmegreen B.	Iau Symposium Proceedings Series	2015
45	Filament formation in molecular clouds as a scale-free process	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES	Iau Symposium Proceedings Series	2015
46	Interstellar MHD Turbulence and Star Formation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Astrophysics And Space Science Library	2015
47	Cluster Assembly in Hierarchically Collapsing Clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI ALEJANDRO GONZALEZ SAMANIEGO PEDRO COLIN ALMAZAN et al.	Iau Symposium Proceedings Series	2015
48	Galactic and magellanic evolution with the SKA	ENRIQUE CRISTIAN VAZQUEZ SEMADENI McClure-Griffiths N.M. Stanimirović S. et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2014
49	Testing assumptions and predictions of star formation theories	Alejandro Gonzalez Samaniego ENRIQUE CRISTIAN VAZQUEZ SEMADENI RICARDO FRANCISCO GONZALEZ DOMINGUEZ et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2014
50	The identification of filaments on far-infrared and submillimeter images: Morphology, physical conditions and relation with star formation of filamentary structure	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Schisano, E. Rygl, K. L. J. et al.	ASTROPHYSICAL JOURNAL	2014
51	Filaments in simulations of molecular cloud formation	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI	ASTROPHYSICAL JOURNAL	2014
52	An evolutionary model for collapsing molecular clouds and their star formation activity. II. Mass dependence of the star formation rate	Manuel Zamora Aviles ENRIQUE CRISTIAN VAZQUEZ SEMADENI	ASTROPHYSICAL JOURNAL	2014
53	Gravitationally contracting clouds and their star formation rate	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Zamora-Avilés M. Toalá J.A.	Astrophysics and Space Science Proceedings	2014

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

54	Applying a one-dimensional PDR model to the Taurus molecular cloud and its atomic envelope	J. S. Heiner ENRIQUE CRISTIAN VAZQUEZ SEMADENI	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2013
55	Molecular cloud evolution-V. Cloud destruction by stellar feedback	PEDRO COLIN ALMAZAN ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2013
56	Physical processes of interstellar turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Environmental Science and Engineering-Environmental Engineering	2013
57	Are there phases in the ISM?	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Eas Publications Series	2012
58	THE FREE-FALL TIME OF FINITE SHEETS AND FILAMENTS	Jesus A. Toala ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES	ASTROPHYSICAL JOURNAL	2012
59	AN EVOLUTIONARY MODEL FOR COLLAPSING MOLECULAR CLOUDS AND THEIR STAR FORMATION ACTIVITY	Manuel Zamora Aviles ENRIQUE CRISTIAN VAZQUEZ SEMADENI PEDRO COLIN ALMAZAN	ASTROPHYSICAL JOURNAL	2012
60	ASPECT RATIO DEPENDENCE OF THE FREE-FALL TIME FOR NON-SPHERICAL SYMMETRIES	Jesus A. Toala ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES et al.	ASTROPHYSICAL JOURNAL	2012
61	FROM DUSTY FILAMENTS TO MASSIVE STARS: THE CASE OF NGC 7538 S	Raul Naranjo Romero LUIS ALBERTO ZAPATA GONZALEZ ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	ASTROPHYSICAL JOURNAL	2012
62	Gravity or turbulence? Velocity dispersion-size relation	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Manuel A. Zamora Aviles et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2011
63	Radiation-magnetohydrodynamic simulations of H II regions and their associated PDRs in turbulent molecular clouds	SARAH JANE ARTHUR WILLIAM JOHN HENNEY ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2011

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

64	Molecular cloud evolution - IV. Magnetic fields, ambipolar diffusion and the star formation efficiency	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES Banerjee, Robi et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2011
65	Gravity or turbulence? - II. Evolving column density probability distribution functions in molecular clouds	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI ADRIANA GAZOL PATIÑO et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2011
66	Radiation-MHD simulations of HII region expansion in turbulent molecular clouds	SARAH JANE ARTHUR WILLIAM JOHN HENNEY FABIO DE COLLE et al.	Iau Symposium Proceedings Series	2011
67	Theory of feedback in clusters and molecular cloud turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Iau Symposium Proceedings Series	2011
68	LOW-MASS GALAXY FORMATION IN COSMOLOGICAL ADAPTIVE MESH REFINEMENT SIMULATIONS: THE EFFECTS OF VARYING THE SUB-GRID PHYSICS PARAMETERS	PEDRO COLIN ALMAZAN VLADIMIR ANTON AVILA REESE ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	ASTROPHYSICAL JOURNAL	2010
69	MOLECULAR CLOUD EVOLUTION. III. ACCRETION VERSUS STELLAR FEEDBACK	ENRIQUE CRISTIAN VAZQUEZ SEMADENI PEDRO COLIN ALMAZAN GILBERTO CARLOS GOMEZ REYES et al.	ASTROPHYSICAL JOURNAL	2010
70	Dependence of the star formation efficiency on global parameters of molecular clouds	Yetli Rosas Guevara ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2010
71	FROM THE CONVERGENCE OF FILAMENTS TO DISK-OUTFLOW ACCRETION: MASSIVE STAR FORMATION IN W33A	Roberto Galvan Madrid LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE et al.	ASTROPHYSICAL JOURNAL	2010
72	On the gravitational content of molecular clouds and their cores	JAVIER BALLESTEROS PAREDES GILBERTO CARLOS GOMEZ REYES BARBARA SELEN PICHARDO SILVA et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2009

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

73	Clump morphology and evolution in MHD simulations of molecular cloud formation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Banerjee, R. Hennebelle, P. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2009
74	HIGH-AND LOW-MASS STAR-FORMING REGIONS FROM HIERARCHICAL GRAVITATIONAL FRAGMENTATION. HIGH LOCAL STAR FORMATION RATES WITH LOW GLOBAL EFFICIENCIES	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES JAVIER BALLESTEROS PAREDES et al.	ASTROPHYSICAL JOURNAL	2009
75	From the warm magnetized atomic medium to molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Hennebelle, P. Banerjee, R. et al.	ASTRONOMY & ASTROPHYSICS	2008
76	The nature of the velocity field in molecular clouds - I. The non-magnetic case	ENRIQUE CRISTIAN VAZQUEZ SEMADENI RICARDO FRANCISCO GONZALEZ DOMINGUEZ JAVIER BALLESTEROS PAREDES et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2008
77	The virial balance of clumps and cores in molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Dib S. Kim J. et al.	ASTROPHYSICAL JOURNAL	2007
78	Molecular cloud evolution. II. From cloud formation to the early stages of star formation in decaying conditions	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES JAVIER BALLESTEROS PAREDES et al.	ASTROPHYSICAL JOURNAL	2007
79	Statistics of core lifetimes in numerical simulations of turbulent, magnetically supercritical molecular clouds	ROBERTO JOSE GALVAN MADRID ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES et al.	ASTROPHYSICAL JOURNAL	2007
80	Formation and collapse of quiescent cloud cores induced by dynamic compressions	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES et al.	ASTROPHYSICAL JOURNAL	2007
81	The virial balance of clumps and cores in molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Dib S. Kim J. et al.	Iau Symposium Proceedings Series	2006
82	Molecular cloud turbulence and the star formation efficiency: Enlarging the scope	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Iau Symposium Proceedings Series	2006
83	Molecular cloud evolution. I. Molecular cloud and thin cold neutral medium sheet formation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI RICARDO FRANCISCO GONZALEZ DOMINGUEZ ADRIANA GAZOL PATIÑO et al.	ASTROPHYSICAL JOURNAL	2006

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

84	The lifetimes and evolution of molecular cloud cores	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Kim J. et al.	ASTROPHYSICAL JOURNAL	2005
85	The thermal pressure distribution in the atomic ISM	ADRIANA GAZOL PATIÑO ENRIQUE CRISTIAN VAZQUEZ SEMADENI Kim J.	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2005
86	The pressure distribution in thermally bistable turbulent flows	ADRIANA GAZOL PATIÑO ENRIQUE CRISTIAN VAZQUEZ SEMADENI Kim J.	ASTROPHYSICAL JOURNAL	2005
87	Star formation efficiency in driven, supercritical, turbulent clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Kim J.	ASTROPHYSICAL JOURNAL	2005
88	Quiescent and coherent cores from gravoturbulent fragmentation	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI MARIA CAROLINA DURAN ROJAS et al.	ASTROPHYSICAL JOURNAL	2005
89	Thermal instability in turbulent models of the interstellar medium	ADRIANA GAZOL PATIÑO ENRIQUE CRISTIAN VAZQUEZ SEMADENI Sánchez-Salcedo J.	ASTROPHYSICS AND SPACE SCIENCE	2004
90	Fragmentation and structure formation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	ASTROPHYSICS AND SPACE SCIENCE	2004
91	Revista Mexicana de Astronomía y Astrofísica: Serie de Conferencias: Preface	MAURICIO REYES RUIZ ENRIQUE CRISTIAN VAZQUEZ SEMADENI	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2003
92	Intrinsic, observed, and retrieved properties of interstellar turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI BARBARA SELEN PICHARDO SILVA Brunt C.M. et al.	ASTROPHYSICAL JOURNAL	2003
93	Dynamic cores in hydrostatic disguise	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Klessen R.S.	ASTROPHYSICAL JOURNAL	2003
94	The correlation between magnetic pressure and density in compressible MHD turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Passot T.	ASTRONOMY & ASTROPHYSICS	2003
95	A holistic scenario of turbulent molecular cloud evolution and control of the star formation efficiency: First tests	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES Klessen R.S.	ASTROPHYSICAL JOURNAL	2003

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

96	The nonlinear development of the thermal instability in the atomic interstellar medium and its interaction with random fluctuations	FRANCISCO JAVIER SANCHEZ SALCEDO ENRIQUE CRISTIAN VAZQUEZ SEMADENI ADRIANA GAZOL PATIÑO	ASTROPHYSICAL JOURNAL	2002
97	Velocity structure of the interstellar medium as seen by the spectral correlation function	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Goodman A.A.	ASTROPHYSICAL JOURNAL	2002
98	Turbulent dissipation in the interstellar medium: The coexistence of forced and decaying regimes and implications for galaxy formation and evolution	VLADIMIR ANTON AVILA REESE ENRIQUE CRISTIAN VAZQUEZ SEMADENI	ASTROPHYSICAL JOURNAL	2001
99	Emissivity statistics in turbulent compressible magnetohydrodynamic flows and the density-velocity correlation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI BARBARA SELEN PICHARDO SILVA Lazarian A. et al.	ASTROPHYSICAL JOURNAL	2001
100	The probability distribution function of column density in molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI García N.	ASTROPHYSICAL JOURNAL	2001
101	The temperature distribution in turbulent interstellar gas	ADRIANA GAZOL PATIÑO ENRIQUE CRISTIAN VAZQUEZ SEMADENI FRANCISCO JAVIER SANCHEZ SALCEDO et al.	ASTROPHYSICAL JOURNAL	2001
102	Is thermal instability significant in turbulent galactic gas?	ENRIQUE CRISTIAN VAZQUEZ SEMADENI ADRIANA GAZOL PATIÑO Scalo J.	ASTROPHYSICAL JOURNAL	2000
103	On the effects of projection on morphology	BARBARA SELEN PICHARDO SILVA ENRIQUE CRISTIAN VAZQUEZ SEMADENI ADRIANA GAZOL PATIÑO et al.	ASTROPHYSICAL JOURNAL	2000
104	Turbulent flow-driven molecular cloud formation: A solution to the post-T Tauri problem?	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Hartmann L.	ASTROPHYSICAL JOURNAL	1999
105	Clouds as turbulent density fluctuations: Implications for pressure confinement and spectral line data interpretation	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI Scalo J.	ASTROPHYSICAL JOURNAL	1999
106	On the probability density function of galactic gas. I. Numerical simulations and the significance of the polytropic index	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Scalo J. Chappell D. et al.	ASTROPHYSICAL JOURNAL	1998
107	Density probability distribution in one-dimensional polytropic gas dynamics	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Passot T.	PHYS REV E	1998

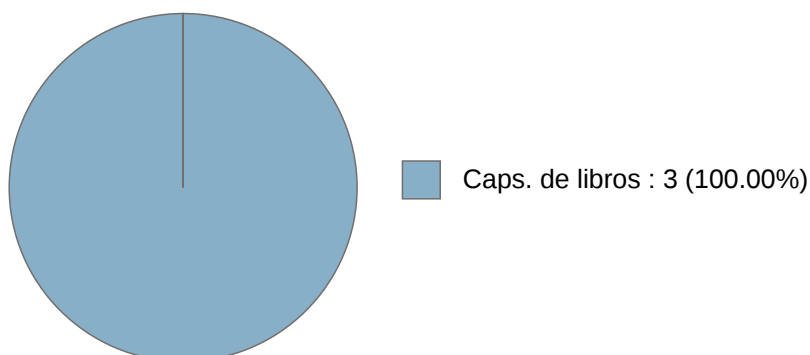
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108	Does turbulent pressure behave as a logatropo?	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JORGE DANIEL CARLOS CANTO ILLA ESTELA SUSANA LIZANO SOBERON	ASTROPHYSICAL JOURNAL	1998
109	A search for Larson-type relations in numerical simulations of the ISM: Evidence for nonconstant column densities	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES LUIS FELIPE DE JESUS RODRIGUEZ JORGE	ASTROPHYSICAL JOURNAL	1997
110	Influence of cooling-induced compressibility on the structure of turbulent flows and gravitational collapse	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Passot T. Pouquet A.	ASTROPHYSICAL JOURNAL	1996
111	A turbulent model for the interstellar medium. I. Threshold star formation and self-gravity	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Passot T. Pouquet A.	ASTROPHYSICAL JOURNAL	1995
112	A turbulent model for the interstellar medium. II. Magnetic fields and rotation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Passot T. Pouquet A.	ASTROPHYSICAL JOURNAL	1995
113	Hierarchical structure in nearly pressureless flows as a consequence of self-similar statistics	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	ASTROPHYSICAL JOURNAL	1994
114	Reduced wave set method for high-resolution turbulence simulations	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Scalo J.	PHYSICAL REVIEW LETTERS	1992
115	High-resolution calculations of reduced waveset two-dimensional turbulence	ENRIQUE CRISTIAN VAZQUEZ SEMADENI Scalo J.M.	Physics Of Fluids A	1992

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

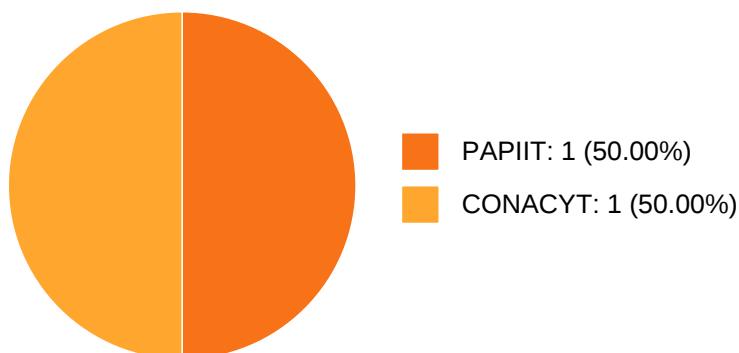


#	Título	Autores	Alcance	Año	ISBN
1	Formation of Molecular Clouds and Global Conditions for Star Formation	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES	Capítulo de un Libro	2014	0816531242
2	The Milky Way as a Star Formation Engine	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Capítulo de un Libro	2014	0816531242
3	Formation of Molecular Clouds and Global Conditions	ENRIQUE CRISTIAN VAZQUEZ SEMADENI JAVIER BALLESTEROS PAREDES	Capítulo de un Libro	2014	0816531242

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos

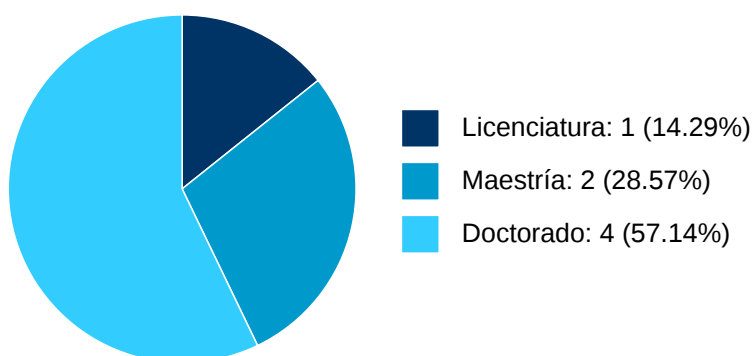


#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Interacción gravedad turbulencia en la formación estelar.	ENRIQUE CRISTIAN VAZQUEZ SEMADENI	Recursos CONACYT	01-10-2016	01-10-2020
2	Poniendo a prueba el modelo de colapso jerárquico global con teoría y observaciones	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT	Recursos PAPIIT	01-01-2023	31-12-2025

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

PARTICIPACIÓN EN TESIS

Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Evolución del momento angular específico durante el colapso y fragmentación de nubes moleculares	Tesis de Maestría	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Arroyo Chávez, Griselda,	Instituto de Radioastronomía y Astrofísica,	2020
2	Generación no adiabática de turbulencia durante el colapso gravitacional	Tesis de Maestría	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Guerrero Gamboa, Rubén Patricio,	Instituto de Radioastronomía y Astrofísica,	2020
3	Propiedades físicas de núcleos densos inmersos en nubes moleculares filamentosarias : simulaciones y comparación con observaciones	Tesis de Doctorado	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Camacho Pérez, Vianey Edaly,	Instituto de Radioastronomía y Astrofísica,	2019
4	Pruebas y caracterización del colapso gravitacional jerárquico en nubes moleculares	Tesis de Doctorado	JAVIER BALLESTEROS PAREDES,	ENRIQUE CRISTIAN VAZQUEZ SEMADENI, LUIS ALBERTO ZAPATA GONZALEZ, et al.	Instituto de Radioastronomía y Astrofísica,	2018

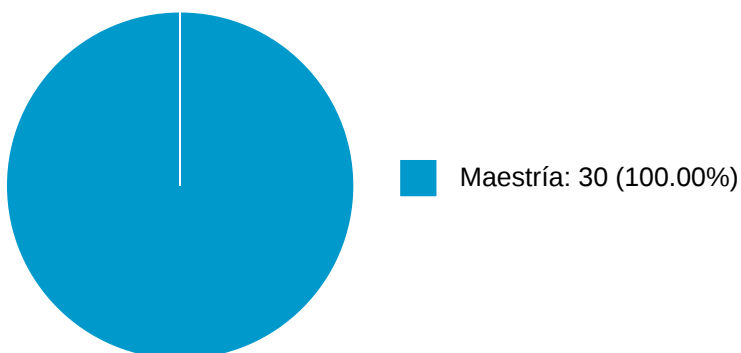
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5	Reformulación del concepto de eficiencia de formación estelar en nubes moleculares en evolución	Tesis de Doctorado	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Zamora Avilés, Manuel Abelardo,	Centro de Radioastronomía y Astrofísica en Morelia, Mich.,	2015
6	Propiedades físicas y estadísticas de las nubes simulaciones numericas del medio interestelar	Tesis de Doctorado	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Ballesteros Paredes, Javier,		1999
7	Estados de equilibrio de un modelo escalar no local de turbulencia bidimensional	Tesis de Licenciatura	ENRIQUE CRISTIAN VAZQUEZ SEMADENI,	Hernández Zapata, Sergio,		1996

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	9	2022-1
2	Maestría	DINÁMICA DE GASES EN ASTROFÍSICA DEL CAMPO DE CONOCIMIENTO TEORÍA, OBSERVACIONAL	Instituto de Radioastronomía y Astrofísica	1	2021-1
3	Maestría	SEMINARIO DE GRADUACIÓN	Instituto de Radioastronomía y Astrofísica	1	2020-2
4	Maestría	SEMINARIO DE INVESTIGACIÓN II DE LOS CAMPOS DE CONOCIMIENTO TEÓRICA, OBSERVACIONAL, CAMPOS PART	Instituto de Radioastronomía y Astrofísica	1	2020-1
5	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	4	2020-1
6	Maestría	SEMINARIO DE GRADUACIÓN	Instituto de Radioastronomía y Astrofísica	1	2019-2
7	Maestría	SEMINARIO DE INVESTIGACIÓN I DE LOS CAMPOS DE CONOCIMIENTO TEOR, OBSV, CPAR	Instituto de Radioastronomía y Astrofísica	1	2019-2
8	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	3	2019-1

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9	Maestría	SEMINARIO DE INVESTIGACIÓN I DE LOS CAMPOS DE CONOCIMIENTO TEOR,OBSV,CPAR	Instituto de Radioastronomía y Astrofísica	1	2018-2
10	Maestría	SEMINARIO DE INVESTIGACIÓN I DE LOS CAMPOS DE CONOCIMIENTO TEOR,OBSV,CPAR	Instituto de Radioastronomía y Astrofísica	1	2018-2
11	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	2	2018-1
12	Maestría	SEMINARIO DE INVESTIGACION III	Instituto de Radioastronomía y Astrofísica	1	2017-2
13	Maestría	MATERIA INTERESTELAR-318585	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2017-1
14	Maestría	MATERIA INTERESTELAR-396842	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	4	2017-1
15	Maestría	MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2016-1
16	Maestría	SEMINARIO DE GRADUACION	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2015-1
17	Maestría	ASTROFISICA TEORICA - PROBLEMAS CONTEMPORANEOS DE DINAMICA DE GASES EN ASTROFISICA	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2014-2
18	Maestría	SEMINARIO DE INVESTIGACION II	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2014-2
19	Maestría	MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	6	2014-1

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20	Maestría	SEMINARIO DE INVESTIGACION I	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2013-2
21	Maestría	PROBLEMAS CONTEMPORANEOS DE MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2013-1
22	Maestría	MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	7	2012-1
23	Maestría	MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	3	2010-2
24	Maestría	SEMINARIO DE INVESTIGACION III	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2010-1
25	Maestría	SEMINARIO DE INVESTIGACION II	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2009-2
26	Maestría	SEMINARIO DE INVESTIGACION II	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2009-1
27	Maestría	SEMINARIO DE INVESTIGACION II	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2009-1
28	Maestría	SEMINARIO DE INVESTIGACION I	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2009-1
29	Maestría	SEMINARIO DE INVESTIGACION I	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	2	2008-2
30	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Astronomía	1	2008-1



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



ENRIQUE CRISTIAN VAZQUEZ SEMADENI

PATENTES

No se encuentran registros en la base de datos de patentes asociados a:

ENRIQUE CRISTIAN VAZQUEZ SEMADENI

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FUENTES DE INFORMACIÓN

Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024