

# Citas a artículos de investigación del

Dr. Gerardo Hernández Dueñas

Junio 13, 2023

Table 1: Citas a mis artículos en revistas, tesis y proceedings

Artículo	Citas tipo A	Citas Tipo B	Citas Tipo C	Total
Artículo JSC 2010	28	0	1	29
Artículo JSC 2011	26	0	4	30
Artículo JFM 2013	17	17	2	36
Artículo M2AN 2014	15	4	3	22
Artículo JFM 2014	11	3	1	15
Artículo JAS 2015	3	9	0	12
Artículo AdvRes 2016	18	2	1	21
Artículo SWTG 2017	3	0	1	4
Artículo QJRMS 2019	0	3	0	3
Artículo IJNMF 2021	4	0	0	4
Artículo AHP 2022	0	1	0	1
Artículo JNLS 2023	1	0	0	1
Artículo M2AN 2023	1	0	0	1
				<b>Total: 179</b>

## Abreviación de los artículos citados:

### • Artículo JSC 2010

**Título:** A Hybrid Algorithm for the Baer-Nunziato Model Using the Riemann Invariants

**Autores:** Karni, Smadar; Hernandez-Duenas, Gerardo

**Revista:** JOURNAL OF SCIENTIFIC COMPUTING Volume: 45 Issue: 1-3 Pages: 382-403

**Año de publicación:** OCT 2010

### • Artículo JSC 2011

**Título:** Shallow Water Flows in Channels

**Autores:** Hernandez-Duenas, G; Karni, S

**Revista:** JOURNAL OF SCIENTIFIC COMPUTING Volume: 48 Issue: 1-3 Pages: 190-208 DOI: 10.1007/s10915-010-9430-x

**Año de publicación:** 2011

• **Artículo JFM 2013**

**Título:** Minimal models for precipitating turbulent convection

**Autores:** Hernandez-Duenas, Gerardo; Majda, Andrew J; Smith, Leslie M; Stechmann, Samuel N

**Revista:** Journal of Fluid Mechanics Volume: 717. Pages: 576–611

**Año de publicación:** 2013

• **Artículo JFM 2014.**

**Título:** Investigation of Boussinesq dynamics using intermediate models based on wave-vortical interactions.

**Autores:** G. Hernández-Dueñas, L. M. Smith, and S. N. Stechmann.

**Revista:** Journal of Fluid Mechanics. Vol 747 (2014), pp. 247-287.

**DOI:** 10.1175/JAS-D-14-0317.1

• **Artículo M2AN 2014**

**Título:** A positivity preserving central scheme for shallow water flows in channels with wet-dry states

**Autor(es):** Balbas, J (Balbas, Jorge); Hernandez-Duenas, G (Hernandez-Duenas, Gerardo)

**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis Volume: 48 Issue: 3 Pages: 665-696

DOI: 10.1051/m2an/2013106 Published: MAY 2014

• **Artículo JAS 2015.**

**Título:** Stability and instability criteria for idealized precipitating hydrodynamics.

**Autores:** G. Hernandez-Duenas, L.M. Smith, and S. N. Stechmann.

**Revista:** Journal of Atmospheric Sciences. Vol 72, No. 6 (2015), pp. 2379-2393.

**DOI:** 10.1175/JAS-D-14-0317.1

• **Artículo AdvRes 2016**

**Título:** A central-upwind scheme with artificial viscosity for shallow-water flows in channels

**Autor(es):** Hernandez-Duenas, Gerardo; Beljadid, Abdelaziz;

**Revista:** Journal of Advances in Water Resources Volume: 96 Issue: 3 Pages: 323-338

Published: 2016

• **Artículo SWTG 2017.**

**Título:** A Hybrid Method to Solve Shallow Water Flows with Horizontal Density Gradients.

**Autores:** G. Hernández-Dueñas.

**Revista:** Journal of Scientific Computing. Vol 73 (2017), pp. 753-782.

**DOI:** 10.1175/JAS-D-14-0317.1

• **Artículo QJRMS 2019.**

**Título:** Weak-and strong-friction limits of parcel models: Comparisons and stochastic convective initiation time

**Autores:** Hernandez-Duenas, Gerardo and Smith, Leslie M and Stechmann, Samuel N.

**Revista:** Quarterly Journal of the Royal Meteorological Society (2019), 145,722, 2272-2291.

**DOI:** <https://doi.org/10.1002/qj.3557>

• **Artículo IJNMF 2021.**

**Título:** A well-balanced positivity-preserving central-upwind scheme for one-dimensional blood flow models

**Autores:** Hernandez-Duenas, Gerardo and Ramirez-Santiago, Guillermo

**Revista:** International Journal for Numerical Methods in Fluids.

**DOI:** <https://doi.org/10.1002/fld.4887>

• **Artículo AHP 2022.**

**Título:** Perturbations of the Landau Hamiltonian: asymptotics of eigenvalue clusters

**Autores:** Hernandez-Duenas, G and Pérez-Esteve, S and Uribe, A and Villegas-Blas, C

**Revista:** Annales Henri Poincaré (2022), 23,2,361- 391.

**DOI:** <https://doi.org/10.1007/s00023-021-01092-7>

• **Artículo JNLS 2023.**

**Título:** A patch in time saves nine: Methods for the identification of localised dynamical behaviour and lifespans of coherent structures

**Autores:** Blachut, Chantelle and González-Tokman, Cecilia and Hernández-Dueñas, Gerardo

**Revista:** Journal of Nonlinear Science (2023), 33,4,1-32.

**DOI:** <https://doi.org/10.1007/s00332-023-09911-3>

- **Artículo M2AN 2023.**

**Título:** A new two-dimensional blood flow model with arbitrary cross sections

**Autores:** Rosales-Alcantar, Cesar Alberto and Hernandez-Duenas, Gerardo

**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis

**DOI:** <https://doi.org/10.1051/m2an/2023030>

**Detalles de las Citas:**

## 1 Tipo A:

### A.1 Artículo citado:

#### **Artículo JSC 2010**

##### **Citas en revistas indizadas:**

1. **Título:** A well-balanced numerical scheme for a model of two-phase flows with treatment of nonconservative terms  
**Autor(es):** Thanh, Mai Duc  
**Revista::** Advances in Computational Mathematics  
Published: 2019
2. **Título:** Building a van Leer-type numerical scheme for a model of two-phase flows  
**Autor(es):** Thanh, Mai Duc and Cuong, Dao Huy  
**Revista::** Applied Mathematics and Computation  
Published: 2019
3. **Título:** A few results on the modelling of multiphase flows  
**Autor(es):** Jean-Marc Herard  
**Revista::** AMIS 2012  
Published: 2012
4. **Título:** Completing a well-balanced numerical method for a model of two-phase flows by computing correctors  
**Autor(es):** Mai Duc Thanh  
**Revista::** Applied Mathematics and Computation  
Published: 2017
5. **Título:** Oleinik a través del espejo  
**Autor(es):** Pablo Castañeda  
**Revista::** Miscelánea Matemática  
Published: 2016

6. **Título:** A Technique for Computing Dense Granular Compressible Flows with Shock Waves

**Autor(es):** Ryan W. Houim, Elaine S. Oran

**Revista::** ArXiv

Published: 2014

7. **Título:** Building a Godunov-type numerical scheme for a model of two-phase flows

**Autor(es):** Dao Huy Cuong, Mai Duc Thanh

**Revista::** Computers and Fluids

Published: 2017

8. **Título:** Constructing a Godunov-type scheme for the model of a general fluid flow in a nozzle with variable cross-section

**Autor(es):** Cuong, Dao Huy and Thanh, Mai Duc

**Revista::** Applied Mathematics and Computation Volume: 305 Pages: 136-160 DOI: <https://doi.org/10.1016/j.amc.2016.01.001>

Published: 2017

ISSN: ISSN: 0096-3003

9. **Título:** A multiphase model for compressible granular-gaseous flows: formulation and initial tests

**Autor(es):** Houim, RW (Houim, Ryan W.); Oran, ES (Oran, Elaine S.)

**Revista::** JOURNAL OF FLUID MECHANICS Volume: 789 Pages: 166-220 DOI: 10.1017/jfm.2015.728

Published: FEB 2016

Accession Number: WOS:000368417100006

ISSN: 0022-1120

eISSN: 1469-7645

10. **Título:** WELL-BALANCED ROE-TYPE NUMERICAL SCHEME FOR A MODEL OF TWO-PHASE COMPRESSIBLE FLOWS

**Autor(es):** Thanh, MD (Mai Duc Thanh)

**Revista::** JOURNAL OF THE KOREAN MATHEMATICAL SOCIETY Volume: 51 Issue: 1

Pages: 163-187 DOI: 10.4134/JKMS.2014.51.1.163 Published: JAN 2014

Accession Number: WOS:000329769700010

ISSN: 0304-9914

eISSN: 2234-3008

11. **Título:** Numerical investigation of a modified family of centered schemes applied to multiphase equations with nonconservative sources

**Autor(es):** Crochet, MW (Crochet, M. W.); Gonthier, KA (Gonthier, K. A.)

**Revista::** JOURNAL OF COMPUTATIONAL PHYSICS Volume: 255 Pages: 266-292 DOI:

10.1016/j.jcp.2013.08.010 Published: DEC 15 2013

Accession Number: WOS:000325527100014

ISSN: 0021-9991

eISSN: 1090-2716

12. **Título:** A robust numerical method for approximating solutions of a model of two-phase flows and its properties

**Autor(es):** Thanh, MD (Mai Duc Thanh); Kroner, D (Kroener, Dietmar); Chalons, C (Chalons, Christophe)

**Revista::** APPLIED MATHEMATICS AND COMPUTATION Volume: 219 Issue: 1 Pages:

320-344 DOI: 10.1016/j.amc.2012.06.022 Published: SEP 15 2012

Accession Number: WOS:000306748900029

ISSN: 0096-3003

eISSN: 1873-5649

13. **Título:** Numerical approximation for a Baer-Nunziato model of two-phase flows

**Autor(es):** Mai, DT (Mai Duc Thanh); Kroner, D (Kroener, Dietmar); Nguyen, TN (Nguyen Thanh Nam)

**Revista:** APPLIED NUMERICAL MATHEMATICS Volume: 61 Issue: 5 Pages: 702-721 DOI:

10.1016/j.apnum.2011.01.004 Published: MAY 2011

Accession Number: WOS:000288295700006

ISSN: 0168-9274

eISSN: 1873-5460

14. **Título:** A phase decomposition approach and the Riemann problem for a model of two-phase flows

**Autor(es):** Thanh, Mai Duc

**Revista:** Journal of Mathematical Analysis and Applications, Volume 418, Issue, Pages = 569-594, Published = 2014

ISSN: 0022-247X

15. **Título:** Existence of solutions to the Riemann problem for a model of two-phase flows

**Autor(es):** THANH, MAIDUC and CUONG, DAOHUY

**Revista:** Electronic Journal of Differential Equations, Volume 2015, Issue 32, Pages 1-18, 2015

16. **Título:** A Godunov-type scheme for the isentropic model of a fluid flow in a nozzle with variable cross-section

**Autor(es):** Cuong, Dao Huy and Thanh, Mai Duc

**Revista:** Applied Mathematics and Computation, Volume 256, Pages 602-629, 2015

17. **Título:** High order finite volume WENO schemes for the shallow water flows through channels with irregular geometry

**Autor(es):** Xing, Yulong

**Revista:** Journal of Computational and Applied Mathematics, 2015

18. **Título:** Simulation of unsteady gas-particle flow induced by the shock-wave interaction with a particle layer

**Autor(es):** Volkov, KN and Emelyanov, VN and Karpenko, AG and Teterina, IV

**Revista:** Numerical methods and programming (21) 2020, pp. 96-114.

19. **Título:** A multiphase model for compressible granular-gaseous flows: formulation and initial tests

**Autor(es):** Houim, Ryan W and Oran, Elaine S

**Revista:** Journal of fluid mechanics (789) 2016, pp.166–220.

20. **Título:** Numerical approximation for a Baer–Nunziato model of two-phase flows

**Autor(es):** Thanh, Mai Duc and Kröner, Dietmar and Nam, Nguyen Thanh

**Revista:** Applied Numerical Mathematics (5), 2022, 702–721.

21. **Título:** Two-dimensional effects on the interaction of a shock wave with a cloud of particles

**Autor(es):** Volkov, Konstantin Nikolaevich and Emelyanov, Vladislav Nikolaevich and Karpenko, Anton Gennad'evich and Teterina, Irina Vladimirovna

**Revista:** Numerical Methods and Programming (21) 2020, 207–224.

22. **Título:** Oleinik a través del espejo

**Autor(es):** Castaneda, Pablo

**Revista:** Miscelánea Mat (62), 2016, 63–79

23. **Título:** A staggered-projection Godunov-type method for the Baer-Nunziato two-phase model

**Autor(es):** Lei, Xin and Li, Jiequan

**Revista:** Journal of Computational Physics (437), 2021, 63–79

**Citas en proceedings:**

1. **Título:** A splitting method for the isentropic Baer-Nunziato two-phase flow model

**Autor(es):** Coquel, Frédéric and Hérard, Jean-Marc and Saleh, Khaled

**Fuente:** ESAIM: Proceedings, Volume 38, Pages 241-256, 2012

2. **Título:** On the computation of the Baer-Nunziato model,

**Autor(es):** Crouzet, Fabien ; Daude, Frédéric ; Galon, Pascal ; Helluy, Philippe and Hérard, Jean-Marc and Liu, Yujie,

**Fuente:** Contribution to the 42th AIAA FD conference

3. **Título:** Modelling compressible multiphase flows

**Autor(es):** Coquel, Frédéric ; Gallouët, Thierry ; Helluy, Philippe ; Hérard, Jean-Marc ; Hurisse, Olivier and Seguin, Nicolas

**Fuente:** ESAIM: Proceedings, Volume 40, Pages 34-50, 2013

**Citas en revistas no indizadas:**

1. **Título:** Building fast well-balanced two-stage numerical schemes for a model of two-phase flows

**Autor(es):** Thanh, Mai Duc

**Revista:** Communications in Nonlinear Science and Numerical Simulation, Volume 19, Issue 6, Pages 1836-1858, 2014,

**Citas en tesis doctorales:**

1. **Título:** Contribution à la vérification et à la validation d'un modèle diphasique bifluide instationnaire

**Autor(es):** Liu, Yujie, 2013. Aix-Marseille Université.

2. **Título:** MODELING, NUMERICAL ANALYSIS, AND PREDICTIONS FOR THE DETONATION OF MULTI-COMPONENT ENERGETIC SOLIDS,

**Autor(es):** Crochet, Michael Wayne, 2013. Louisiana State University

**A.2 Artículo citado:**

**Artículo JSC 2011**

**Citas en revistas indizadas:**

1. **Título:** A steady-state-preserving scheme for shallow water flows in channels  
**Autor(es):** Liu, Xin  
**Revista:** Journal of Computational Physics  
**Año de Publicación:** 2020
2. **Título:** A Well-Balanced and Positivity-Preserving Numerical Model for Shallow Water Flows in Channels with Wet–Dry Fronts  
**Autor(es):** Liu, Xin  
**Revista:** Journal of Scientific Computing  
**Año de Publicación:** 2020
3. **Título:** High order well-balanced finite difference WENO schemes for shallow water flows along channels with irregular geometry  
**Autor(es):** Wang, Xiufang and Li, Gang and Qian, Shouguo and Li, Jiaojiao and Wang, Zhen  
**Revista:** Applied Mathematics and Computation  
Published: 2019
4. **Título:** Positivity-preserving well-balanced discontinuous Galerkin methods for the shallow water flows in open channels  
**Autor(es):** Shouguo Qian, Gang Li, Fengjing Shao, Yulong Xingc,  
**Revista:** Advances in Water Resources  
Published: 2018
5. **Título:** FINITE VOLUME MULTILEVEL APPROXIMATION OF THE SHALLOW WATER EQUATIONS WITH A TIME EXPLICIT SCHEME  
**Autor(es):** ARTHUR BOUSQUET, MARTINE MARION, AND ROGER TEMAM  
**Revista:** INTERNATIONAL JOURNAL OF NUMERICAL ANALYSIS AND MODELING  
Published: 2016
6. **Título:** Numerical Methods for the Nonlinear Shallow Water Equations  
**Autor(es):** Y. Xing  
**Publicación del libro:** Handbook of Numerical Analysis
7. **Título:** Well-balanced positivity preserving cell-vertex central-upwind scheme for shallow water flows  
**Autor(es):** Beljadid, A ; Mohammadian, A and Kurganov, A

**Revista:** Computers & Fluids. Volume: 136. Pages: 193–206 Published: 2016

8. **Título:** Well-balanced high order 1d schemes on non-uniform grids and entropy residuals

**Autor(es):** Puppo, Gabriella and Semplice, Matteo

**Revista:** Journal of Scientific Computing. Volume: 66 Issue 3. Pages: 1052–1076

Published: 2016

9. **Título:** Shallow-water sloshing in a moving vessel with variable cross-section and wetting–drying using an extension of George’s well-balanced finite volume solver

**Autor(es):** Ardakani, Hamid Alemi ; Bridges, Thomas J and Turner, Matthew R

**Revista:** Journal of Computational Physics. Volume: 314 Pages: 590–617 Published: 2016

10. **Título:** A symplectic integrator for dynamic coupling between nonlinear vessel motion with variable cross-section and bottom topography and interior shallow-water sloshing

**Autor(es):** Ardakani, Hamid Alemi

**Revista:** Journal of Fluids and Structures. Volume: 65 Pages: 30–43 Published: 2016

11. **Título:** High order finite volume WENO schemes for the shallow water flows through channels with irregular geometry

**Autor(es):** Xing, Yulong

**Revista:** Journal of Computational and Applied Mathematics. Volume: 299 Pages: 229–244  
Published: 2016

12. **Título:** Well-Balanced High Order 1D Schemes on Non-uniform Grids and Entropy Residuals

**Autor(es):** Puppo, G (Puppo, G.); Semplice, M (Semplice, M.)

**Revista:** JOURNAL OF SCIENTIFIC COMPUTING Volume: 66 Issue: 3 Pages: 1052-1076

DOI: 10.1007/s10915-015-0056-x Published: MAR 2016

ISSN: 0885-7474

eISSN: 1573-7691

13. **Título:** Open Water Flow in a Wet/Dry Multiply-Connected Channel Network: A Robust Numerical Modeling Algorithm

**Autor(es):** SERGII KIVVA, MARK ZHELEZNYAK, OLEKSANDR PYLYPENKO, and VASYL YOSCHENKO

**Revista:** Pure and Applied Geophysics

**Año de Publicación:** 2020

14. **Título:** Timescale interpolation and no-neighbour discretization for a 1D finite-volume Saint-Venant solver  
**Autor(es):** Hodges, Ben R and Liu, Frank  
**Fuente:** Journal of Hydraulic Research (51), 2020, 738–754
15. **Título:** A momentum-conserving scheme for flow simulation in 1D channel with obstacle and contraction  
**Autor(es):** Swastika, Putu Veri and Pudjaprasetya, Sri Redjeki and Wiryanto, Leo Hari and Hadiarti, Revi Nurfathhiyah  
**Fuente:** Multidisciplinary Digital Publishing Institute (6), 2021, 1–26
16. **Título:** Exactly well-balanced positivity preserving nonstaggered central scheme for open-channel flows  
**Autor(es):** Dong, Jian and Fang Li, Ding  
**Revista:** International Journal for Numerical Methods in Fluids  
**Año de Publicación:** 2020
17. **Título:** Very high order well-balanced schemes for non-prismatic one-dimensional channels with arbitrary shape  
**Autor(es):** Escalante, Cipriano and Castro, Manuel J and Semplice, Matteo  
**Revista:** Applied Mathematics and Computation (398), 2021 (125-993)
18. **Título:** Source Terms  
**Autor(es):** Godlewski, Edwige and Raviart, Pierre-Arnaud  
**Revista:** Numerical Approximation of Hyperbolic Systems of Conservation Laws, 2021, 627–747
19. **Título:** Open Water Flow in a Wet/Dry Multiply-Connected Channel Network: A Robust Numerical Modeling Algorithm  
**Autor(es):** Kivva, Sergii and Zheleznyak, Mark and Pylypenko, Oleksandr and Yoschenko, Vasyl  
**Revista:** Pure and Applied Geophysics (7), 2020, 3421–3458
20. **Título:** A flux globalization based well-balanced path-conservative central-upwind scheme for the shallow water flows in channels  
**Autor(es):** Chen, Yiming and Kurganov, Alexander and Na, Mingye  
**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis (2023)
21. **Título:** The momentum-conserving simulation for shallow water flows in channels with arbitrary

cross-sections

**Autor(es):** Hadiarti, Revi Nurfathhiyah and Pudjaprasetya, Sri Redjeki and Swastika, Putu Veri

**Revista:** European Journal of Mechanics-B/Fluids (2023)

22. **Título:** Moving water equilibria preserving nonstaggered central scheme for open-channel flows

**Autor(es):** Li, Zhen and Dong, Jian and Luo, Yiming and Liu, Min and Li, Dingfang

**Revista:** Mathematical Methods in the Applied Sciences (2023)

#### Citas en tesis doctorales:

1. **Título:** A depth-averaged numerical model for simulating heat and fluid flows in vegetated channels

**Autor(es):** Larmaei, Moradi.

**Universidad:** DÉPARTEMENT DES GÉNIES CIVIL, GÉOLOGIQUE, ET DES MINES ÉCOLE POLYTECHNIQUE DE MONTRÉAL.

2. **Título:** Evaluation of the Measurement Capabilities of an Autonomous Surface Vessel in Coastal Regions

**Autor(es):** MORGAN EMILY HARVIE,

**Universidad:** Master of Science (Research) in Earth and Ocean Sciences at The University of Waikato **Año de Publicación:** 2019

#### Citas en preprints:

1. **Título:** A central-upwind scheme for open water flow in a wet/dry multi-connected channel network

**Autor(es):** Kivva, Sergii and Zheleznyak, Mark and Pilipenko, Alexander and Yoschenko, Vasy

**Fuente:** arXiv preprint arXiv:1708.05363

2. **Título:** A central-upwind scheme for open water flow in a wet/dry multiply-connected channel network

**Autor(es):** Kivva, Sergii and Zheleznyak, Mark and Pilipenko, Alexander and Yoschenko, Vasyl

**Fuente:** arXiv:1708.05363

#### A.3 Artículo citado: Artículo JFM 2013

#### Citas en revistas indizadas:

1. **Título de Review Article:** Moisture transfer by turbulent natural convection

**Autor(es):** Zhang, Lu and Chong, Kai Leong and Xia, Ke-Qing

**Revista::** Journal of Fluid Mechanics

**Año de publicación:** 2019

2. **Título de Review Article:** Multiscale Models in Geophysical Fluid Dynamics

**Autor(es):** Ian Grooms and Keith Julien

**Revista::** Earth and Space Science

**Año de publicación:** 2018

**Nota:** Proponen que nuestro modelo se puede usar para sus técnicas multi-escalares.

3. **Título:** A simple system for moist convection: the Rainy?Bénard model

**Autor(es):** Geoffrey K. Vallis, Douglas J. Parker and Steven M. Tobias

**Revista::** Journal of Fluid Mechanics

**Año de publicación:** 2019

**Nota:** Vallis es sumamente reconocido en su área y autor del libro clásico "Atmospheric and oceanic fluid dynamics". Al citarnos, indica que usarán la misma formulación para la temperatura dada por Clausius?Clapeyron.

4. **Título:** A Stochastic Lagrangian Basis for a Probabilistic Parameterization of Moisture Condensation in Eulerian Models

**Autor(es):** YUE-KIN TSANG, GEOFFREY K. VALLIS

**Revista::** Journal of Atmospheric Sciences

**Año de publicación:** 2018

**Nota:** Vallis es sumamente reconocido en su área y autor del libro clásico "Atmospheric and oceanic fluid dynamics". Al citarnos, indica que su método se puede aplicar a modelos idealizados con diferentes niveles de complejidad y propone este como el siguiente paso.

5. **Título:** Global well-posedness for passively transported nonlinear moisture dynamics with phase changes

**Autor(es):** Hittmeir, Sabine and Klein, Rupert and Li, Jinkai and Titi, Edriss S

**Revista::** Nonlinearity

**Año de publicación:** 2017

**Nota:** Edriss S. Titi es un matemático muy respetado en el área y que ha trabajado extensamente

en resultados de regularidad y problemas bien planteados, con una publicación en Annals of Mathematics. Recientemente se ha interesado por modelos de flujos oceánicos y atmosféricos, citando el nuestro en su reciente preprint.

6. **Título:** Asymptotics for moist deep convection I: refined scalings and self-sustaining updrafts

**Autor(es):** Hittmeir, Sabine and Klein, Rupert

**Revista::** Theoretical and Computational Fluid Dynamics

**Año de publicación:** 2017

7. **Título:** A kinematic model for understanding rain formation efficiency of a convective cell

**Autor(es):** Fu, Hao and Lin, Yihua

**Revista::** Journal of Advances in Modeling Earth Systems

**Año de publicación:** 2019

8. **Título:** Entrainment in dry and moist thermals

**Autor(es):** G. R. Vybhav

**Revista::** PHYSICAL REVIEW FLUIDS 7, 050501 (2022)

9. **Título:** Direct Numerical Simulation of a Moist Cough Flow using Eulerian Approximation for Liquid Droplets

**Autor(es):** Rohit Singhal, S. Ravichandran , and Sourabh S. Diwan

**Revista::** INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS (2021), VOL. 35, NO. 9, 778-797

10. **Título:** Instability driven by settling and evaporation in a shear flow: A model for asperitas clouds

**Autor(es):** S. Ravichandran

**Revista::** PHYSICAL REVIEW FLUIDS 7, 010501 (2022)

11. **Título:** A Simple Lagrangian Parcel Model for the Initiation of Summertime Mesoscale Convective Systems over the Central United States

**Autor(es):** Yang, Qiu and Leung, L Ruby and Feng, Zhe and Song, Fengfei and Chen, Xingchao

**Revista::** Journal of the Atmospheric Sciences, (2021), 78, 11, 3537 - 3558

12. **Título:** Impact of Global Warming on US Summertime Mesoscale Convective Systems: A Simple Lagrangian Parcel Model Perspective

**Autor(es):** Yang, Qiu and Leung, L Ruby and Feng, Zhe and Chen, Xingchao

**Revista::** Journal of Climate (2023)

13. **Título:** Scaling approaches to quasi-geostrophic theory for moist, precipitating air

**Autor(es):** Bäumer, Daniel and Hittmeir, Sabine and Klein, Rupert

**Revista::** Journal of the Atmospheric Sciences (2023)

**Citas en tesis doctorales:**

1. **Título:** Atmospheric Dynamics with Moisture and Phase Changes

**Autor(es):** Marsico, David H

**Universidad::** The University of Wisconsin - Madison, Department of Mathematics

**Año de publicación:** 2020

2. **Título:** Scalar Transport in Buoyancy-Driven Flows and Kinematic Behavior of Magnetotactic Bacteria

**Autor(es):** Zhang, Lu

**Universidad::** The Chinese University of Hong Kong

**Año de publicación:** 2019

3. **Título:** Fluid dynamics in clouds: The sum of its parts

**Autor(es):** S. Ravichandran, Jason R. Picardo, Samriddhi Sankar Ray, and Rama Govindarajan

**Año de publicación:** 2021

**Citas en tesis doctorales:**

1. **Título:** Global well-posedness of large scale moist atmosphere system with only horizontal viscosity in the dynamic equation

**Autor(es):** Tan, Shenyang and Liu, Wenjun

**Año de publicación:** arXiv preprint arXiv:2210.06337 (2022)

**A.4 Artículo citado: Artículo JFM 2014.**

**Citas en revistas indizadas:**

1. **Título:** Turbulent exchanges between near-inertial waves and balanced flows

**Autor(es):** Thomas, Jim and Daniel, Don

**Revista::** Journal of Fluid Mechanics

**Año de publicación:** 2020

2. **Título:** Two-dimensional isotropic inertia–gravity wave turbulence  
**Autor(es):** Xie, Jin-Han and Bühler, Oliver  
**Universidad:** Journal of Fluid Mechanics **Año de publicación:** 2019
3. **Título:** Components of Nonlinear Oscillation and Optimal Averaging for Stiff PDEs  
**Autor(es):** Adam Peddle  
**Universidad:** University of Exeter **Año de publicación:** 2018
4. **Título:** Ph.D. Thesis: Wave-Vortex Interactions in Rotating, Stratified, and Compressible Flows  
**Autor(es):** Jim Thomas  
**Universidad:** Courant Institute, NYU **Advisors::** Olier Büler, K. Shafer Smith  
**Año de publicación:** 2017  
**Nota:** Los asesores Smith y Büler son muy reconocidos en el área.
5. **Título:** On the Similarity of Lower-Stratospheric Potential Vorticity Dipoles above Tropical and Midlatitude Deep Convection  
**Autor(es):** Hitchman, Matthew H and Rowe, Shellie M  
**Revista::** Journal of the Atmospheric Sciences. Vol 74 (8). Pages 2593–2613.  
**Año de publicación:** 2017
6. **Título:** Quantifying resonant and near-resonant interactions in rotating turbulence  
**Autor(es):** di Leoni, Patricio Clark and Mininni, Pablo D  
**Revista::** Journal of Fluid Mechanics. Vol 809. Pages 821–842  
**Año de publicación:** 2017
7. **Título:** On the Structure and Formation of UTLS PV Dipole/Jetlets in Tropical Cyclones by Convective Momentum Surges  
**Autor(es):** Hitchman, Matthew H and Rowe, Shellie M  
**Revista::** Monthly Weather Review  
**Año de publicación:** 2019
8. **Título:** A wave-vortex decomposition for rotating Boussinesq flows in bounded domains  
**Autor(es):** Jeffrey J. Early, M. Pascale Lelong, Miles A. Sundermeyer  
**Revista:** <https://arxiv.org/pdf/2002.06267.pdf> **Año de publicación:** 2020
9. **Título:** Flow structures and kinetic-potential exchange in forced rotating stratified turbulence  
**Autor(es):** Tianyi Li, Minping Wan, Jianchun Wang, and Shiyi Chen

**Revista:** PHYSICAL REVIEW FLUIDS 5, 014802 (2020) **Año de publicación:** 2020

10. **Título:** Forward flux and enhanced dissipation of geostrophic balanced energy

**Autor(es):** Thomas, Jim and Daniel, Don

**Revista:** Journal of Fluid Mechanics (2021), 911.

11. **Título:** Linear and weakly nonlinear energetics of global nonhydrostatic normal modes

**Autor(es):** Raupp, Carlos FM and Teruya, André SW and Silva Dias, Pedro L

**Revista:** Journal of the Atmospheric Sciences (2019), 76,12, 3831 - 3846

12. **Título:** The catalytic effect of near-inertial waves on-plane zonal jets

**Autor(es):** Zhang, Lin-Fan and Xie, Jim-Han

**Revista:** Journal of Fluid Mechanics (2023)

#### A.5 Artículo citado:

##### Artículo M2AN 2014

1. **Título:** A steady-state-preserving scheme for shallow water flows in channels

**Autor(es):** Liu, Xin

**Revista:** Journal of Computational Physics

**Año de Publicación:** 2020

2. **Título:** A Well-Balanced and Positivity-Preserving Numerical Model for Shallow Water Flows in Channels with Wet–Dry Fronts

**Autor(es):** Liu, Xin

**Revista:** Journal of Scientific Computing

**Año de Publicación:** 2020

3. **Título:** Exactly well-balanced positivity preserving nonstaggered central scheme for open-channel flows

**Autor(es):** Dong, Jian and Fang Li, Ding

**Revista:** International Journal for Numerical Methods in Fluids

**Año de Publicación:** 2020

4. **Título:** High order well-balanced finite difference WENO schemes for shallow water flows along channels with irregular geometry

**Autor(es):** Wang, Xiufang and Li, Gang and Qian, Shouguo and Li, Jiaojiao and Wang, Zhen

**Revista:** Applied Mathematics and Computation

**Año de Publicación:** 2019

5. **Título:** Positivity-preserving well-balanced discontinuous Galerkin methods for the shallow water flows in open channels

**Autor(es):** Shouguo Qian, Gang Li, Fengjing Shao, Yulong Xing,

**Revista:** Advances in Water Resources

**Año de Publicación:** 2018

6. **Título:** Finite volume method with reconstruction and bottom modification for open channel flows: An application to Yom River, Thailand

**Autor(es):** Thida Pongsanguansin, Montri Maleewong & Khamron Mekchay

**Revista:** International Journal for Computational Methods in Engineering Science and Mechanics

**Año de Publicación:** 2018

7. **Título:** A DIFFERENCE SCHEME FOR A DEGENERATING CONVECTION-DIFFUSION-REACTION SYSTEM MODELLING CONTINUOUS SEDIMENTATION

**Autor(es):** Raimund Bürger, Stefan Diehl and Camilo Mejías

**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis

**Año de Publicación:** 2018

8. **Título:** Tesis: Una contribución a las simulaciones numéricas de tanques de sedimentación y aplicaciones relacionadas

**Autor(es):** Mejías Neira, Camilo Ignacio and others

**Revista:** Universidad de Concepción. Facultad de Ciencias Físicas y Matemáticas

**Año de Publicación:** 2019

9. **Título:** Open Water Flow in a Wet/Dry Multiply-Connected Channel Network: A Robust Numerical Modeling Algorithm

**Autor(es):** SERGII KIVVA, MARK ZHELEZNYAK, OLEKSANDR PYLYPENKO, and VA-SYL YOSCHENKO

**Revista:** Pure and Applied Geophysics

**Año de Publicación:** 2020

10. **Título:** The momentum-conserving simulation for shallow water flows in channels with arbitrary cross-sections

**Autor(es):** Hadiarti, Revi Nurfathhiyah and Pudjaprasetya, Sri Redjeki and Swastika, Putu Veri

**Revista:** European Journal of Mechanics-B/Fluids

**Año de Publicación:** 2023

11. **Título:** Moving water equilibria preserving nonstaggered central scheme for open-channel flows

**Autor(es):** Li, Zhen and Dong, Jian and Luo, Yiming and Liu, Min and Li, Dingfang

**Revista:** Mathematical Methods in the Applied Sciences

**Año de Publicación:** 2023

#### Citas en tesis de licenciatura:

1. **Título:** LICENCIADO EN TECNOLOGÍA

**Autor(es):** INTERIANO, RODRIGO BRITO

**Revista:** Universidad Nacional Autónoma DE México (2021)

#### Citas en arxiv:

1. **Título:** A central-upwind scheme for open water flow in a wet/dry multi-connected channel network

**Autor(es):** Kivva, Sergii and Zheleznyak, Mark and Pilipenko, Alexander and Yoschenko, Vasyl

**Revista:** arXiv preprint arXiv:1708.05363

2. **Título:** A well-balanced reconstruction with bounded velocities for the shallow water equations by convex combination

**Autor(es):** Skevington, Edward WG

**Revista:** arXiv preprint arXiv:2106.11273 **Año de Publicación:** 2021

#### A.6 Artículo JAS 2015.

#### Citas en revistas indizadas:

1. **Título:** How Mountain Geometry Affects Aerosol-Cloud-Precipitation Interactions: Part I. Shallow Convective Clouds

**Autor(es):** Seo, Jaemyeong Mango and Lee, Hyunho and Moon, Sungju and Baik, Jong-Jin

**Revista:** Journal of the Meteorological Society of Japan. Ser. II

**Año de publicación:** 2020

2. **Título:** Projected changes in atmospheric moisture transport contributions associated with climate warming

**Autor(es):** Fernández-Alvarez, Jose Carlos and Pérez-Alarcón, Albenis and Rahimi, Stefan and NIETO, RAQUEL and Gimeno, Luis

**Revista:** Research Square

**Año de publicación:** 2022

**Citas en tesis de Doctorado:**

1. **Título:** The role of thermal boundary conditions in rotating Rayleigh-Bénard convection

**Autor(es):** Peifer, Janet Forrester

**Universidad:** University of Leeds (2022)

**A.7 Artículo citado:**

**Artículo AdvRes 2016**

**En revistas indizadas:**

1. **Título:** A steady-state-preserving scheme for shallow water flows in channels

**Autor(es):** Liu, Xin

**Revista:** Journal of Computational Physics

**Año de Publicación:** 2020

2. **Título:** A Well-Balanced and Positivity-Preserving Numerical Model for Shallow Water Flows in Channels with Wet–Dry Fronts

**Autor(es):** Liu, Xin

**Revista:** Journal of Scientific Computing

**Año de Publicación:** 2020

3. **Título:** Dynamics of the Jet Wiping Process via Integral Models

**Autor(es):** Mendez, MA and Gosset, A and Scheid, B and Balabane, M and Buchlin, J-M

**Revista:** arXiv preprint arXiv:2004.13400

**Año de Publicación:** 2020

4. **Título:** Exactly well-balanced positivity preserving nonstaggered central scheme for open-channel flows

**Autor(es):** Dong, Jian and Fang Li, Ding

**Revista:** International Journal for Numerical Methods in Fluids

**Año de Publicación:** 2020

5. **Título:** High order well-balanced finite difference WENO schemes for shallow water flows along channels with irregular geometry

**Autor(es):** Wang, Xiufang and Li, Gang and Qian, Shouguo and Li, Jiaojiao and Wang, Zhen

**Revista:** Applied Mathematics and Computation

Published: 2019

6. **Título:** Positivity-preserving well-balanced discontinuous Galerkin methods for the shallow water flows in open channels

**Autor(es):** Shouguo Qian, Gang Li, Fengjing Shao, Yulong Xing,

**Revista:** Advances in Water Resources

Published: 2018

7. **Título:** Late-time asymptotic behavior of solutions to hyperbolic conservation laws on the sphere

**Autor(es):** Abdelaziz Beljadida, Philippe G. LeFloch, Abdolmajid Mohammadian

**Revista:** Comput. Methods Appl. Mech. Engrg. 349 (2019) 285?311

Published: 2019

8. **Título:** Conservative finite-volume forms of the Saint-Venant equations for hydrology and urban drainage

**Autor(es):** Ben R. Hodgesl

**Revista:** Hydrol. Earth Syst. Sci., 23, 1281?1304, 2019

Published: 2019

9. **Título:** Modelling Torrential Rain Flows in Urban Territories: Floods - Natural Channels (The Case Study of Madeira Island)

**Autor(es):** Sérgio Lousada, Luís Loures **Revista:** American Journal of Water Science and Engineering

**Año de Publicación:** 2020

10. **Título:** Open Water Flow in a Wet/Dry Multiply-Connected Channel Network: A Robust Numerical Modeling Algorithm

**Autor(es):** SERGII KIVVA, MARK ZHELEZNYAK, OLEKSANDR PYLYPENKO, and VA-SYL YOSCHENKO

**Revista:** Pure and Applied Geophysics

**Año de Publicación:** 2020

11. **Título:** Hybrid artificial viscosity–central-upwind scheme for recirculating turbulent shallow water flows

**Autor(es):** Ginting, Bobby Minola and Ginting, Herli

**Revista:** Journal of Hydraulic Engineering (2019), 145,12,

12. **Título:** A structure-preserving algorithm for surface water flows with transport processes

**Autor(es):** Karjoun, Hasan and Beljadid, Abdelaziz and LeFloch, Philippe G

**Revista:** Advances in Computational Mathematics (2022), 48,1,1-32.

13. **Título:** A meshless artificial viscosity method for wet-dry moving interfaces problems of shallow water flow

**Autor(es):** Zhang, Ting and Zhan, Chang-Xun and Wang, Hai-Wei and Lin, Chuan and Guo, Xiao-Mei

**Revista:** Ocean Engineering (2021), 236.

14. **Título:** Exploring induced oscillatory free-surface waves in prismatic open-channel

**Autor(es):** Souad Mnassri, Ali Triki

**Revista:** Ocean Engineering 236 (2021).

#### **En tesis doctorales:**

1. **Título:** Hydrodynamic modeling of vegetated alluvial channel and its application in aquatic ecology

**Autor(es):** Baruah, Anupal J

**Universidad:** Indian Institute of Technology Guwahati

**Año de Publicación:** 2021

**En preprint:**

1. **Título:** 01 MODELLING TORRENTIAL RAIN FLOWS IN URBAN TERRITORIES: FLOODS.  
THE CASE STUDY OF MADEIRA ISLAND

**Autor(es):** Rafael Camacho, B. Sérgio Lousada, C. Rui Castanho

**Published:** 2018

2. **Título:** A central-upwind scheme for open water flow in a wet/dry multiply-connected channel network

**Autor(es):** Kivva, Sergii and Zheleznyak, Mark and Pilipenko, Alexander and Yoschenko, Vasyl

**Fuente:** arXiv:1708.05363

3. **Título:** A well-balanced positivity preserving cell-vertex finite volume method satisfying the discrete maximum-minimum principle for coupled models of surface water flow and scalar transport

**Autor(es):** Hasan Karjoun, Abdelaziz Beljadid, Philippe G. LeFloch

**Fuente:** arXiv:1708.05363

**A.8 Artículo citado:**

**Artículo SWTG 2017**

**Citas en revistas indizadas:**

1. **Título:** A Well-Balanced Central-Upwind Scheme for the Thermal Rotating Shallow Water Equations

**Autor(es):** Kurganov, Alexander and Liu, Yongle and Zeitlin, Vladimir

**Revista:** arXiv preprint arXiv:1911.09277

2. **Título:** High Order Still-Water and Moving-Water Equilibria Preserving Discontinuous Galerkin Methods for the Ripa Model

**Autor(es):** Jolene Britton, Yulong Xing

**Revista:** Journal of Scientific Computing

**Año de Publicación:** 2020

**Citas en tesis doctorales:**

1. **Título:** High Order Numerical Methods for Hyperbolic Balance Laws: Well-Balanced Discontinuous Galerkin Methods and Adjoint-Based Inverse Algorithms

**Autor(es):** Jolene A. Britton

**Universidad:** UNIVERSITY OF CALIFORNIA RIVERSIDE

**A.9 Artículo citado:**

**Artículo IJNMF 2021.**

**Citas en revistas indizadas:**

1. **Título:** Steady-state solutions of one-dimensional equations of non-Newtonian hemodynamics

**Autor(es):** Krivovichev, Gerasim V

**Revista:** International Journal of Biomathematics (2022)

2. **Título:** Analysis of high Reynolds free surface flows

**Autor(es):** Young, DL and Lin, Marvin CH and Tsai, CC

**Revista:** Journal of Mechanics (2022)

3. **Título:** Asymptotic stability of rarefaction wave for a blood flow model

**Autor(es):** Wei, Jing and Yao, Huancheng and Zhu, Changjiang

**Revista:** Mathematical Methods in the Applied Sciences (2023)

4. **Título:** Autor(es): Revista: Differential Equations & Control Processes (2022)

**A.9 Artículo citado:**

**Artículo JNLS 2023.**

**Citas en revistas indizadas:**

1. **Título:** Persistence and material coherence of a mesoscale ocean eddy  
**Autor(es):** Denes, Michael C and Froyland, Gary and Keating, Shane R  
**Revista:** Physical Review Fluids (2023)

A.10 **Articulo citado:**

**Artículo M2AN 2023.**

**Citas en revistas indizadas:**

**Citas en tesis:**

1. **Título:** Navier-Stokes equations in one and two dimensions  
**Autor(es):** Nerdal, Jon  
**Revista:** Louisiana State University and Agricultural & Mechanical College (2022)

## 2 Tipo B

B.I Artículo citado:

**Artículo JFM 2013**

Citas en revistas indizadas:

1. **Título:** Potential Vorticity and Balanced and Unbalanced Moisture

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N and Martin, Jonathan E and Zhang, Yeyu

**Revista::** Journal of the Atmospheric Sciences

**Año de publicación:** 2020

2. **Título:** Expanding Grids for Efficient Cloud Dynamics Simulations Across Scales

**Autor(es):** Marsico, David H and Stechmann, Samuel N

**Revista::** Mathematics of Climate and Weather Forecasting

**Año de publicación:** 2020

3. **Título de Review Article:** Discontinuous Fronts as Exact Solutions to Precipitating Quasi-geostrophic Equations

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N

**Revista::** SIAM Journal on Applied Mathematics

**Año de publicación:** 2019

4. **Título de Review Article:** Instability and nonlinear dynamics of the MJO in a tropical channel model with vertically varying convective adjustment

**Autor(es):** Ogrosky, H Reed and Stechmann, Samuel N and Hottovy, Scott

**Revista::** Theoretical and Computational Fluid Dynamics

**Año de publicación:** 2019

5. **Título:** Moisture transport due to baroclinic waves: Linear analysis of precipitating quasi-geostrophic dynamics

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N

**Revista:** Mathematics of Climate and Weather Forecasting. Volume: 3. Pages: 28–50

**Año de publicación:** 2017

6. **Título:** Precipitating Quasigeostrophic Equations and Potential Vorticity Inversion with Phase

Changes

**Autor(es):** Smith, Leslie M and Stechmann, Samuel N

**Revista:** Journal of the Atmospheric Sciences. Volume: 74 (10). Pages: 3285–3303

**Año de publicación::** 2017

7. **Título:** Balanced and unbalanced components of moist atmospheric flows with phase changes

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N and Martin, Jonathan E

**Revista::** Chinese Annals of Mathematics, Series B

**Año de publicación:** 2019

8. **Título:** Atmospheric Rivers and Water Fluxes in Precipitating Quasi-geostrophic Turbulence

**Autor(es):** Thomas K. Edwards, Leslie M. Smith, Samuel N. Stechmann

**Revista:** Quarterly Journal of the Royal Meteorological Society

**Año de publicación:** 2020

9. **Título:** Energy decompositions for moist Boussinesq and anelastic equations with phase changes

**Autor(es):** Marsico, David H and Smith, Leslie M and Stechmann, Samuel N

**Revista:** Journal of the Atmospheric Sciences (76),11, 2019, 3569-3587

10. **Título:** Spectra of atmospheric water in precipitating quasi-geostrophic turbulence

**Autor(es):** Edwards, Thomas K and Smith, Leslie M and Stechmann, Samuel N

**Revista:** Geophysical & Astrophysical Fluid Dynamics (114),6, 2020, 715–741

11. **Título:** Initial investigations of precipitating quasi-geostrophic turbulence with phase changes

**Autor(es):** Hu, Rentian and Edwards, Thomas K and Smith, Leslie M and Stechmann, Samuel N

**Revista::** Research in the Mathematical Sciences (8),1, 2021, 1-25

12. **Título:** Shallow-cloud impact on climate and uncertainty: A simple stochastic model

**Autor(es):** Eli A. Mueller and Samuel N. Stechmann

**Revista::** Math. Clim. Weather Forecast (6),2020, 16-37.

13. **Título:** Effects of clouds and phase changes on fast-wave averaging: a numerical assessment

**Autor(es):** Yeyu Zhang, Leslie M. Smith and Samuel N. Stechmann

**Revista::** J. Fluid Mech. (2021), vol. 920, A49, doi:10.1017/jfm.2021.427

14. **Título:** Convergence to precipitating quasi-geostrophic equations with phase changes: asymptotics

and numerical assessment

**Autor(es):** Yeyu Zhang, Leslie M.Smith andSamuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

15. **Título:**Fast-Wave Averaging with Phase Changes: Asymptotics and Application to Moist Atmospheric Dynamics

**Autor(es):** Yeyu Zhang, Leslie M.Smith andSamuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

**Citas en preprints:**

1. **Título:**Hamilton's Principle with Phase Changes and Conservation Principles for Moist Potential Vorticity

**Autor(es):** Kooloth, Parvathi and Smith, Leslie M and Stechmann, Samuel N

**Revista::** arXiv preprint arXiv:2206.07734 (2023)

2. **Título:**A nonlinear elliptic PDE from atmospheric science: well-posedness and regularity at cloud edge

**Autor(es):** Remond-Tiedrez, Antoine and Smith, Leslie M and Stechmann, Samuel N

**Revista::** arXiv preprint arXiv:2301.07611 (2023)

**B.2 Articulo citado: Artículo JFM 2014.**

**Citas en revistas indizadas:**

1. **Título:** A generalized wave-vortex decomposition for rotating Boussinesq flows with arbitrary stratification

**Autor(es):** Early, Jeffrey J and Lelong, M Pascale and Sundermeyer, Miles A

**Revista:** Journal of Fluid Mechanics (2021), 912.

2. **Título:** Effects of clouds and phase changes on fast-wave averaging: a numerical assessment

**Autor(es):** Yeyu Zhang, Leslie M. Smith and Samuel N. Stechmann

**Revista::** J. Fluid Mech. (2021), vol. 920, A49, doi:10.1017/jfm.2021.427

3. **Título:**Convergence to precipitatingquasi-geostrophic equationswith phase changes:asymptotics and numericalassessment

**Autor(es):** Yeyu Zhang, Leslie M.Smith and Samuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

4. **Título:** Fast-Wave Averaging with Phase Changes: Asymptotics and Application to Moist Atmospheric Dynamics

**Autor(es):** Yeyu Zhang, Leslie M.Smith and Samuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

### B.3 Artículo JAS 2015.

#### Citas en revistas indizadas:

1. **Título de Review Article:** Discontinuous Fronts as Exact Solutions to Precipitating Quasi-geostrophic Equations

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N

**Revista::** SIAM Journal on Applied Mathematics

**Año de publicación:** 2019

2. **Título de Review Article:** Instability and nonlinear dynamics of the MJO in a tropical channel model with vertically varying convective adjustment

**Autor(es):** Ogrosky, H Reed and Stechmann, Samuel N and Hottovy, Scott

**Revista::** Theoretical and Computational Fluid Dynamics

**Año de publicación:** 2019

3. **Título:** Precipitating Quasigeostrophic Equations and Potential Vorticity Inversion with Phase Changes

**Autor(es):** LESLIE M. SMITH, SAMUEL N. STECHMANN

**Revista:** Journal of Atmospheric Sciences

Published: 2017

4. **Título:** Moisture transport due to baroclinic waves: Linear analysis of precipitating quasi-geostrophic dynamics

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N

**Revista:** Mathematics of Climate and Weather Forecasting. Volume: 3. Pages: 28–50

Published: 2017

5. **Título:** Energy decompositions for moist Boussinesq and anelastic equations with phase changes

**Autor(es):** Marsico, David H and Smith, Leslie M and Stechmann, Samuel N

**Revista::** Journal of the Atmospheric Sciences (76),11, 2019, 3569-3587

6. **Título:** Initial investigations of precipitating quasi-geostrophic turbulence with phase changes

**Autor(es):** Hu, Rentian and Edwards, Thomas K and Smith, Leslie M and Stechmann, Samuel N

**Revista::** Research in the Mathematical Sciences (8),1, 2021, 1-25

7. **Título:** Convergence to precipitating quasi-geostrophic equations with phase changes: asymptotics and numerical assessment

**Autor(es):** Yeyu Zhang, Leslie M. Smith and Samuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

8. **Título:** Fast-Wave Averaging with Phase Changes: Asymptotics and Application to Moist Atmospheric Dynamics

**Autor(es):** Yeyu Zhang, Leslie M. Smith and Samuel N. Stechmann

**Revista::** Phil.Trans.R.Soc.A380: 2021003

9. **Título:** Atmospheric Dynamics with Moisture and Phase Changes

**Autor(es):** Marsico, David H

**Universidad::** The University of Wisconsin - Madison, Department of Mathematics

**Año de publicación:** 2020

#### B.4 Artículo citado:

**Artículo QJRMS 2019.**

#### Citas en revistas indizadas:

1. **Título:** Energy decompositions for moist Boussinesq and anelastic equations with phase changes

**Autor(es):** Marsico, David H and Smith, Leslie M and Stechmann, Samuel N

**Revista::** Journal of the Atmospheric Sciences (76),11, 2019, 3569-3587

2. **Título:** Potential Vorticity and Balanced and Unbalanced Moisture

**Autor(es):** Wetzel, Alfredo N and Smith, Leslie M and Stechmann, Samuel N and Martin, Jonathan E and Zhang, Yeyu

**Revista::** Journal of the Atmospheric Sciences

**Año de publicación:** 2020

3. **Título:** Rain process models and convergence to point processes  
**Autor(es):** Hottovy, Scott and Stechmann, Samuel N  
**Revista::** Nonlinear Processes in Geophysics  
**Año de publicación:** 2023

B.5 **Articulo citado:**

- **Artículo AHP 2022.**

**Citas en revistas indizadas:**

1. **Título:** On the Explicit Semiclassical Limiting Eigenvalue (Resonance) Distribution for the Zeeman (Stark) Hydrogen Atom Hamiltonian  
**Autor(es):** Pérez-Estrada, Carlos and Villegas-Blas, Carlos  
**Revista::** Spectral Theory and Mathematical Physics (2022), 199-227

B.6 **Articulo citado:**

- **Artículo AdvRes 2016**

**Citas en revistas indizadas:**

1. **Título:** An efficient semi-implicit friction source term treatment for modeling overland flow  
**Autor(es):** Beljadid, Abdelaziz and Hanini, Amine  
**Revista:** Advances in Water Resources (2023).

**Citas en revistas preprints:**

1. **Título:** A numerical model preserving nontrivial steady-state solutions for predicting waves run-up on coastal areas  
**Autor(es):** Karjoun, Hasan and Beljadid, Abdelaziz  
**Revista:** arXiv preprint arXiv:2210.01499 (2022).

### **3 Tipo C (autocitas):**

#### **C.4 Articulo citado:**

##### **JSC 2010**

1. **Título:** A Hybrid Method to Solve Shallow Water Flows with Horizontal Density Gradients  
**Autor(es):** Hernandez-Duenas, Gerardo  
**Revista:** J Sci Comput (2017) 73:753?782  
Published: 2017

#### **C.1 Articulo citado:**

##### **JSC 2011**

##### **Citas:**

1. **Título:** A central-upwind scheme with artificial viscosity for shallow-water flows in channels  
**Autor(es):** Hernandez-Duenas, Gerardo; Beljadid, Abdelaziz;  
**Revista:** Journal of Advances in Water Resources Volume: 96 Issue: 3 Pages: 323-338  
Published: 2016
2. **Título:** A positivity preserving central scheme for shallow water flows in channels with wet-dry states  
**Autor(es):** Balbas, J (Balbas, Jorge); Hernandez-Duenas, G (Hernandez-Duenas, Gerardo)  
**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis Volume: 48 Issue: 3 Pages: 665-696  
DOI: 10.1051/m2an/2013106 Published: MAY 2014  
Accession Number: WOS:000335388600002  
Author Identifiers:  
**3.** **Título:** A Hybrid Method to Solve Shallow Water Flows with Horizontal Density Gradients.  
**Autores:** G. Hernández-Dueñas.  
**Revista:** Journal of Scientific Computing. Vol 73 (2017), pp. 753-782.  
**DOI:** 10.1175/JAS-D-14-0317.1
4. **Título:** Bathymetry and friction estimation from transient velocity data for one-dimensional shallow water flows in open channels with varying width.

**Autores:** Hernández-Dueñas, Gerardo and Moreles, Miguel Angel and González-Casanova, Pedro.

**Revista:** Physics of Fluids (2023).

## C.2 Artículo citado:

### JFM 2013

1. **Título:** Weak-and strong-friction limits of parcel models: Comparisons and stochastic convective initiation time

**Autor(es):** Hernandez-Duenas, Gerardo and Smith, Leslie M and Stechmann, Samuel N

**Revista:** Quarterly Journal of the Royal Meteorological Society

Published: 2019

2. **Título:** Stability and Instability Criteria for Idealized Precipitating Hydrodynamics

**Autor(es):** Hernandez-Duenas, G (Hernandez-Duenas, Gerardo); Smith, LM (Smith, Leslie M.); Stechmann, SN (Stechmann, Samuel N.)

**Revista:** JOURNAL OF THE ATMOSPHERIC SCIENCES Volume: 72 Issue: 6 Pages: 2379-

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ISSN: 0022-4928

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**Autor(es):** GERARDO HERNÁNDEZ-DUEÑAS, M.-PASCALE LELONG, AND LESLIE M. SMITH.

**Revista:** Journal of Physical Oceanography (2021), 3495 - 3511

2. **Título:** A patch in time saves nine: Methods for the identification of localised dynamical behaviour and lifespans of coherent structures

**Autor(es):** Blachut, Chantelle and González-Tokman, Cecilia and Hernández-Dueñas, Gerardo.

**Revista:** Journal of Nonlinear Science (2023)

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1. **Título:** A central-upwind scheme with artificial viscosity for shallow-water flows in channels

**Autor(es):** Hernandez-Duenas, Gerardo; Beljadid, Abdelaziz;

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Published: 2016

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**Autor(es):** Hernandez-Duenas, Gerardo and Balbás, Jorge

**Revista:** ESAIM: Mathematical Modelling and Numerical Analysis (2021)

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**Autor(es):** Moreles, Miguel Angel and Hernandez-Duenas, Gerardo and Gonzalez-Casanova, Pedro

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**Autor(es):** Hernandez-Duenas, Gerardo, Velasco-García, Ulises and Velasco-Hernández, Jorge X.

**Revista:** ESAIM: M2AN (2019) 53:1433 - 1457

Published: 2019