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# Curriculum vitae

Name: Primitivo B. Acosta Humanez

Date: February 20, 2010

Surname: Acosta Humanez

Name: Primitivo Belen

Passport Number: CC 78714847

Date and place of birth Colombia, November 26 1973

Affiliation: Sergio Arboleda University

..... School of Mathematics

..... IMA (Institute of Mathematics and its Applications)

Official Address: Calle 74 No. 14-14, Bogotá – Carrera 29D No. 30 - 207, Santa Marta

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Email: primi@ima.usergioarboleda.edu.co

Especialization (UNESCO Code): 1202-19

Current employment: Researcher

Date of beginning: 1 de agosto 2009

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### Specialization

Field of research.

Algebraic and Analytic methods in Dynamical Systems: Differential Galois Theory, integrability and not integrability of hamiltonian systems in classic mechanics, spectral theory and quantum mechanics. Differential Galois theory or also known as Picard - Vessiot theory, is the Galois theory in linear differential equations. There are several applications of this theory, one of these is Morales-Ramis theory, theory in which two different kind of notion of integrability are related: integrability in Liouville sense of hamiltonian systems and integrability in Picard-Vessiot sense of differential equations. My principal line of research is the application of differential Galois theory in spectral theory and quantum mechanics. On this subject, I am working with Juan Morales-Ruiz (Universidad Politécnica de Madrid), Moulay Barkatou and Jacques-Arthur Weil (Université de Limoges).

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### Education

Degree	Place	Date
Telematic Engineer, Bachelor	Ideas University (Bogotá - Colombia)	July 2001
MA in Applied Mathematics	Sergio Arboleda University (Bogotá - Colombia)	December 2003
Mathematics, Bachelor	Sergio Arboleda University (Bogotá - Colombia)	April 2004
DEA - Applied Mathematics	Technical University of Catalonia (Barcelona - Spain)	October 2006

Phd	Place	Date
Applied Mathematics	Technical University of Catalonia (Barcelona - Spain)	July 2009.

## Previous professional employments

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Position	Place	Date
Full time assistant professor	Ideas University (Bogotá - Colombia)	1999 - 2001
Full time assistant professor	Konrad Lorenz University (Bogotá - Colombia)	2001 - 2002
Full time assistant professor	National Pedagogic University (Bogotá - Colombia)	2002 - 2003
Partial time assistant professor	Sergio Arboleda University (Bogotá - Colombia)	2003 - 2004
FPI - Scholarship	Technical University of Catalonia (Barcelona - Spain)	2005 - 2007
Assistant Researcher	Technical University of Catalonia (Barcelona - Spain)	2008 - 2009
Research (Postdoctoral) Position	Université de Limoges (Limoges - France)	2008 - 2009

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### Language (B = beginner, M = medium, E = Excelent)

Language	Speak	Read	Write
Spanish	E	E	E
English	E	E	E
French	M	M	M
Catalan	M	M	M

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### Publications

(Key: B = book, CB = chapter of book, P = paper, R = "review", E = editor, D = Dissertations and other restricted research documents.)

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Authors: P. Acosta-Humánez, Lluís Alseda and Amadeu Delshams

Title: Dance - RTNS Lecture Notes 2004

Ref:  journal  book

Key: E Language: En Pages, initial: 1 final: 189 Year: Preprint

Editorial or place of publication: Barcelona, Spain

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Authors: P. Acosta-Humánez, Lluís Alseda and Amadeu Delshams

Title: Dance - RTNS Lecture Notes 2005

Ref:  journal  book

Key: E Language: En Pages, initial: 1 final: 95 Year: Preprint

Editorial or place of publication: Barcelona, Spain

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Authors: P. Acosta-Humánez, Lluís Alsedà and Amadeu Delshams

Title: Dance - RTNS Lecture Notes 2006

Ref:  journal  book

Key: E Language: En Pages, initial: 1 final: 189 Year: Preprint

Editorial or place of publication: Barcelona, Spain

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Authors: P. Acosta Humánez

Title: Lectures on Integrability

Ref:  journal  book

Key: E Language: Sp Pages, initial: 1 final: 80 Year: Preprint

Editorial or place of publication: Bogotá - Colombia

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Authors: P. Acosta-Humánez and Francisco Marcellán

Title: Differential Algebra, Complex Analysis and Orthogonal Polynomials

Ref:  journal  book Contemporary Mathematics Series CONM/509

Key: E Language: En Pages, initial: 1 final: 231 Year: 2010

Editorial or place of publication: American Mathematical Society, Rhode Island, USA

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Authors: P. Acosta-Humánez

Title: Galoisian Approach to Supersymmetric Quantum Mechanics

Ref:  journal  book PhD Thesis, Technical University of Catalonia

Key: D Language: En Pages, initial: 1 final: 115 Year: 2009

Editorial or place of publication: Barcelona, Spain

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Authors: J. Charris, B. Aldana and P. Acosta Humánez

Title: Algebra I: Foundations and Group Theory

Ref:  journal  book ISBN: 958-9205-64-X

Key: B Language: Sp Pages, initial: 1 final: 239 Year: 2005

Editorial or place of publication: Bogotá - Colombia

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Authors: P. Acosta Humánez

Title: Dihedral Groups and  $(p, q)$ -Groups

Ref:  journal  book Bachelor dissertation, Sergio Arboleda University

Key: D Language: Sp Pages, initial: 1 final: 36 Year: 2003

Editorial or place of publication: Barcelona, Spain

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Authors: P. Acosta Humánez

Title: Learning playing and playing learning elementary mathematics

Ref:  journal  book ISBN: 958-96493-1-9  
Key: B Language: Sp Pages, initial: 1 final: 221 Year: 1998  
Editorial or place of publication: Bogotá - Colombia

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Authors P. Acosta-Humánez, Juan Morales-Ruiz and Jacques-Arthur Weil

Title: Galoisian Approach to integrability of Schrödinger Equation

Ref:  journal  book Reports on Mathematical Physics  
Key: P Volume: Pages, initial: 1 final: 62 Year: Preprint  
Editorial or place of publication: Accepted

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Authors P. Acosta-Humánez, M. Álvarez and J. Delgado

Title: Non-integrability of some few body problems

Ref:  journal  book J. Qualitative Theory of Dynamical Systems  
Key: P Volume: Pages, initial: 1 final: 33 Year: Preprint  
Editorial or place of publication: Accepted

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Authors P. Acosta-Humánez

Title: Nonautonomous Hamiltonian Systems and Morales-Ramis Theory. The case  $\ddot{x} = f(x, t)$

Ref:  journal  book SIAM J. Applied Dynamical Systems  
Key: P Volume: 8 Pages, initial: 279 final: 297 Year: 2009  
Editorial or place of publication: Society for Industrial and Applied Mathematics

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Authors P. Acosta-Humánez, David Blázquez-Sanz and Camilo Vargas Contreras

Title: On Hamiltonian Potentials with Quartic Polynomial Normal Variational equations.

Ref:  journal  book Nonlinear Studies  
Key: P Volume: 16 Pages, initial: 299 final: 313 Year: 2009  
Editorial or place of publication: Daytona

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Authors P. Acosta-Humánez and David Blázquez-Sanz

Title: Hamiltonian Systems and Variational equations with polynomial coefficients

Ref:  journal  book Dynamic Systems and Applications  
Key: P Volume: 5 Pages, initial: 6 final: 10 Year: 2008  
Editorial or place of publication: Atlanta

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Authors P. Acosta Humánez, D. Blázquez-Sanz

Title: Non-Integrability of Some Hamiltonians with Rational Potential

Ref:  journal  book Discrete and Continuous Dynamical Systems Series B

Key: P Volume: 10 Pages, initial: 265 final: 293 Year: 2008

Editorial or place of publication: Springfield

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Authors P. Acosta Humánez

Title: Genealogy of Simple Permutations with Order a Power of Two

Ref:  journal  book Revista Colombiana de Matemáticas

Key: P Volume: 42 Pages, initial: 1 final: 14 Year: 2008

Editorial or place of publication: Sociedad Colombiana de Matemáticas - Bogotá

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Authors P. Acosta Humánez, J.H. Pérez

Title: Differential Galois Theory: An Approximation

Ref:  journal  book Revista ERM

Key: P Volume: 15 Pages, initial: 91 final: 102 Year: 2007

Editorial or place of publication: Universidad del Valle - Cali (Colombia)

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Authors P. Acosta Humánez

Title: Morales-Ramis Theory and Kovacic's algorithm

Ref:  journal  book Revista Colombiana de Matemáticas

Key: P Volume: VE Pages, initial: 21 final: 56 Year: 2006

Editorial or place of publication: Sociedad Colombiana de Matemáticas - Bogotá

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Authors P. Acosta Humánez, J.H. Pérez

Title: An Introduction to Differential Galois Theory

Ref:  journal  book Boletín de Matemáticas

Key: P Volume: 11 Pages, initial: 138 final: 149 Year: 2004

Editorial or place of publication: Universidad Nacional de Colombia - Bogotá

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Authors P. Acosta-Humánez

Title: An application of functional analysis in a predator - prey system

Ref:  journal  book Dynamic Systems and Applications

Key: P Volume: 4 Pages, initial: 35 final: 38 Year: 2004

Editorial or place of publication: Atlanta

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Authors P. Acosta Humánez

Title: On second order linear differential equations and Kovacic's algorithm

Ref:  journal  book Civilizar

Key: A Volume: Pages, initial: 209 final: 220 Year: 2004

Editorial or place of publication: Sergio Arboleda University - Bogotá

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Authors P. Acosta Humánez

Title: Sequences of Polynomial Roots

Ref:  journal  book Civilizar

Key: P Volume: 6 Pages, initial: 57 final: 62 Year: 2004

Editorial or place of publication: Sergio Arboleda University - Bogotá

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Authors P. Acosta Humánez

Title: The Pasting Operation and the Square of Natural Numbers

Ref:  journal  book Civilizar

Key: P Volume: 3 Pages, initial: 85 final: 97 Year: 2003

Editorial or place of publication: Sergio Arboleda University - Bogotá

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Authors P. Acosta Humánez

Title: Isomorphism Theorems in Dihedral Groups

Ref:  journal  book Lecturas Matemáticas

Key: P Volume: 24 Pages, initial: 123 final: 136 Year: 2003

Editorial or place of publication: Sociedad Colombiana de Matemáticas - Bogotá

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Authors P. Acosta Humánez

Title: A capture model with towers and iterated exponentials

Ref:  journal  book Integración

Key: P Volume: 16 Pages, initial: 51 final: 57 Year: 2001

Editorial or place of publication: Universidad Industrial de Santander - Bucaramanga

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Authors P. Acosta-Humánez

Title: Shape-invariance approach and Hamiltonian hierarchy method on the Woods-Saxon potential for  $\ell \neq 0$  states. J. Math. Chem. 43 (2008), no. 3, 944–954

Ref:  journal  book By C. Berkdemir, A. Berkdemir and R. Sever

Key: R Volume: Pages, initial: 1 final: 1 Year: 2010

Editorial or place of publication: Mathematical Reviews MR2386543 (2010a:81079)

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**Authors** P. Acosta-Humánez

**Title:** The structure of supersymmetry in  $\mathcal{PT}$  symmetric quantum mechanics. *Phys. Lett. B* 673 (2009), no. 4-5, 283-287

**Ref:**  journal  book By D. Bazeia, A. Das, L. Greenwood and L. Losano

**Key:** R **Volume:** **Pages, initial:** 1 **final:** 1 **Year:** 2010

**Editorial or place of publication:** Mathematical Reviews MR 2504188

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## Stays of Research

KEY: D = doctoral, P = postdoctoral, I = invited, C = contracted, O = others (specify).

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**Institute and/or University:** Departamento de Matemática Aplicada a Caminos, Canales y Puertos, Universidad Politécnica de Madrid

**City:** Madrid                      **Country:** Spain              **Date:** 2010                      **Duration (weeks):** 1

**Subject:** Darboux integrability and Differential Galois Theory

**Key:** I

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**Institute and/or University:** Institute XLim, Université de Limoges

**City:** Limoges                      **Country:** France              **Date:** 2010                      **Duration (weeks):** 1

**Subject:** Darboux transformations, Eigenrings and Differential Galois Theory

**Key:** I

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**Institute and/or University:** Departamento de Matemática Aplicada 1, Universitat Politècnica de Catalunya

**City:** Barcelona                      **Country:** France              **Date:** 2009                      **Duration (weeks):** 2

**Subject:** Darboux integrability and Differential Galois Theory

**Key:** I

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**Institute and/or University:** Institute XLim, Université de Limoges

**City:** Limoges                      **Country:** France              **Date:** 2008-2009                      **Duration (weeks):** 53

**Subject:** Darboux transformations, Eigenrings and Differential Galois Theory

**Key:** D

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**Institute and/or University:** Departamento de Matemática Aplicada a Caminos Canales y Puertos , Universidad Politécnica de Madrid

**City:** Madrid                      **Country:** Spain              **Date:** 2009                      **Duration (weeks):** 4

**Subject:** Differential Galois Theory and Quantum Mechanics

**Key:** I

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**Institute and/or University:** Departamento de Matemática, Universidad Autónoma Metropolitana, Iztapalapa

**City:** Mexico D.F                      **Country:** Mexico              **Date:** 2008                      **Duration (weeks):** 3

**Subject:** Morales-Ramis Theory

**Key:** I

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**Institute and/or University:** Departamento de Matemática Aplicada, Universidad de Valladolid  
**City:** Valladolid      **Country:** Spain      **Date:** 2008      **Duration (weeks):** 1  
**Subject:** Non-autonomous Hamiltonian Systems and Morales-Ramis Theory  
**Key:** I

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**Institute and/or University:** Departamento de Matemáticas, Universidad Sergio Arboleda  
**City:** Bogotá      **Country:** Colombia      **Date:** 2008      **Duration (weeks):** 5  
**Subject:** Supersymmetric Quantum Mechanics  
**Key:** I

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**Institute and/or University:** Departamento de Matemáticas, Universidad Sergio Arboleda  
**City:** Bogotá      **Country:** Colombia      **Date:** 2007      **Duration (weeks):** 8  
**Subject:** Galois Theory and Spectral Theory  
**Key:** I

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**Institute and/or University:** Departamento de Matemática Aplicada, Universidad Pública de Navarra  
**City:** Pamplona      **Country:** España      **Date:** 2007      **Duration (weeks):** 1  
**Subject:** Inverse Problems in Morales-Ramis Theory  
**Key:** I

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**Institute and/or University:** Departamento de Matemáticas, Universidad Sergio Arboleda  
**City:** Bogotá      **Country:** Colombia      **Date:** 2006      **Duration (weeks):** 4  
**Subject:** Asymptotic Methods in Dynamical Systems  
**Key:** I

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**Institute and/or University:** Departamento de Matemáticas, Universidad Sergio Arboleda  
**City:** Bogotá      **Country:** Colombia      **Date:** 2005      **Duration (weeks):** 8  
**Subject:** Morales - Ramis Theory  
**Key:** I

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**Institute and/or University:** Instituto de Matemáticas y Ciencias Aplicadas  
**City:** Lima      **Country:** Perú      **Date:** 2004      **Duration (weeks):** 2  
**Subject:** Tchebyshev Polynomials and Generalizations  
**Key:** I

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## PARTICIPATION AS ORGANIZER IN MEETINGS

**Organizers:** P. Acosta-Humánez and Gerard Olivar

**Name of the Meeting:** School on Applied Mathematics and Innovation 2010: Non-smooth systems and applications

**Kind of Meeting:** International

**Speakers:** Mario Di Bernardo, Enric Fossas, Enrique Ponce

**Place:** Santa Marta - Colombia

**Date:** November 8 – 12, 2010

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**Organizers:** P. Acosta-Humánez and David Blazquez-Sanz

**Name of the Meeting:** Second UPC Integrability Seminar

**Kind of Meeting:** International

**Speakers:** Yuri Fedorov, Andrzej Maciejewski, Juan José Morales-Ruiz, Maria Przybylska, Misturu Shibayama, Kazuyuki Yagasaki, Haruo Yoshida

**Place:** Barcelona - Spain

**Date:** June 7 – 8, 2010

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**Organizers:** P. Acosta-Humánez and David Blazquez-Sanz

**Name of the Meeting:** Jairo Charris Seminar 2010: Algebraic Aspects of Darboux Transformations, Quantum Integrable Systems and Supersymmetric Quantum Mechanics

**Kind of Meeting:** International, announced in AMS

**Speakers:** To be announced. Scientific Committee: Peter Olver, Alexander Turbiner, Niky Kamran, Alberto Grumbaun, Federico Finkel and Mikhail Plyushchay

**Place:** Santa Marta - Colombia

**Date:** August 4 – 7, 2010

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**Organizers:** P. Acosta-Humánez and David Blazquez-Sanz

**Name of the Meeting:** Jairo Charris Seminar 2009: Symmetries of Differential and Difference Equations

**Kind of Meeting:** International, announced in AMS

**Speakers:** Peter Olver, Nail Ibragimov, Sonia Jiménez, Jaques Sauloy, Jacques Arthur Weil, Bernardo Wolf and Rafail K. Gazizov

**Place:** Bogotá - Colombia

**Date:** July 31 – August 2, 2009

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**Organizers:** P. Acosta-Humánez and Juan Morales-Ruiz

**Name of the Meeting:** Algebraic Methods in Dynamical Systems 2008

**Kind of Meeting:** International, announced in AMS

**Speakers:** Michaël Ayoul, David Blázquez-Sanz, Daniel Bertrand, José Cano, Guy Casale, Guillaume Duval, Anne Granier, Jerald Kovacic, Andrzej Maciejewski, Bernard Malgrange, Jorge Mozo, Jesús Muñoz, Ricardo Pérez-Marco, Maria Przybylska, Jean-Pierre Ramis, Julien Roques, Carles Simó, Sergi Simon, Michael Singer, Hiroshi Umemura, Marius Van Der Put, Pol Vanhaecke, Jean-Francois Viaud and Jacques-Arthur Weil

**Place:** Barcelona, Spain

**Date:** February 4–8, 2008

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**Organizers:** P. Acosta-Humánez and David Blázquez-Sanz

**Name of the Meeting:** Jairo Charris Seminar 2008: Orthogonal Polynomials and Complex Analysis

**Kind of Meeting:** International, announced in AMS

**Speakers:** Primitivo Acosta-Humánez, David Blázquez-Sanz, Mohammed El Aïdi, Mourad Ismail, Francisco Marcellán, David Mond, Marlio Paredes, Guillermo Rodriguez, Felix Soriano, Luis Manuel Tovar and Walter Van Assche

**Place:** Bogotá - Colombia

**Date:** August 1–3, 2008

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**Organizers:** P. Acosta-Humánez and Reinaldo Núñez

**Name of the Meeting:** Jairo Charris Seminar 2007: Differential Algebra

**Kind of Meeting:** International, announced in AMS

**Speakers:** Primitivo Acosta-Humánez, David Blázquez-Sanz, Alberto Campos, Ester Galina, César Gómez, J. Tomás Lázaro, Juan Morales-Ruiz, Camilo Sanabria, Camilo Vargas-Contreraas, Orlando Organista and Marlio Paredes

**Place:** Bogotá - Colombia

**Date:** July 13–15, 2007

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Organizer of local mathematical meetings in Colombia from 1994 to 2004 (Universidad de Cordoba, Universidad Javeriana, Universidad Sergio Arboleda).

#### **PARTICIPATION AS SPEAKER IN MEETINGS**

**Speakers:** P. Acosta-Humánez

**Title:** Galoisian Approach to Supersymmetric Quantum Mechanics

**Kind of participation:** Plenary

**Name of the Meeting:** Congreso Colombiano de Matemáticas

**Kind of Meeting:** National

**Place:** Cali, Colombia

**Date:** August 3–6, 2009

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**Speakers:** P. Acosta-Humánez

**Title:** Algebrization and Supersymmetric Quantum Mechanics

**Kind of participation:** Short talk

**Name of the Meeting:** Colloquium of Algorithms in Differential and Difference Equations

**Kind of Meeting:** Local – U. de Limoges

**Place:** Limoges, France

**Date:** March 23–24, 2009

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**Speakers:** P. Acosta-Humánez  
**Title:** Differential Galois Theory and Orthogonal Polynomials  
**Kind of participation:** Plenary  
**Name of the Meeting:** Jairo Charris Seminar in Algebra and Analysis 2008 (SJCH 08)

**Kind of Meeting:** International, U. Politècnica de Catalunya – U. Sergio Arboleda

**Place:** Bogotá, Colombia

**Date:** August 1–3, 2008

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**Speakers:** P. Acosta-Humánez  
**Title:** Spring Pendulum Systems and Morales-Ramis Theory  
**Kind of participation:** Plenary  
**Name of the Meeting:** HAMSYS 2008

**Kind of Meeting:** SMM: Sociedad Matematica Mexicana

**Place:** Guanajuato, México

**Date:** July 7–11, 2008

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**Speakers:** P. Acosta-Humánez  
**Title:** Differential Galois Theory and Supersymmetric Quantum Mechanics  
**Kind of participation:** Plenary  
**Name of the Meeting:** World Congress on Non-linear Analysis WCNA 2008

**Kind of Meeting:** IFNA: International Federation of Nonlinear Analysts

**Place:** Orlando, United States

**Date:** July 2–9, 2008

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**Speakers:** P. Acosta-Humánez  
**Title:** Galoisian approach to Supersymmetric Quantum Mechanics  
**Kind of participation:** Short talk  
**Name of the Meeting:** SIDE 8: Symmetries and Integrability in Difference Equations

**Kind of Meeting:** CRM: Centre de Recherche Mathématiques

**Place:** Montreal, Canada

**Date:** June 22–28, 2008

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**Speakers:** P. Acosta-Humánez  
**Title:** Non-Autonomous Hamiltonian Systems and Morales-Ramis Theory  
**Kind of participation:** Plenary  
**Name of the Meeting:** Second Colloquium on Dynamical Systems, Control and Applications DYSCA II  
**Kind of Meeting:** Local, organized by Universidad Autonoma Metropolitana (UAM)

**Place:** Mexico D.F. Mexico

**Date:** November 30–December 2, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Algebrization of Differential Equations  
**Kind of participation:** Long talk  
**Name of the Meeting:** VII Americas School in Differential Equations and Nonlinear Analysis

**Kind of Meeting:** AMS – SCM: American Mathematical Society joint with Sociedad Colombiana de Matemáticas  
**Place:** Cartagena de Indias, Colombia **Date:** July 21–25, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Dihedral groups as Galois groups of equations  
**Kind of participation:** Long Talk  
**Name of the Meeting:** XII Congreso Latinoamericano de Álgebra

**Kind of Meeting:** ELAM: Escuela Latinoamericana de Matemáticas  
**Place:** Medellin, Colombia **Date:** July 21–25, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Galois groups of differential equations with polynomial coefficients  
**Kind of participation:** Short talk  
**Name of the Meeting:** Congreso Colombiano de Matemáticas

**Kind of Meeting:** National  
**Place:** Medellin, Colombia **Date:** July 16–19, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Galois theory and spectral theory  
**Kind of participation:** Plenary  
**Name of the Meeting:** Jairo Charris Seminar in Algebra and Analysis 2007 (SJCH 07)

**Kind of Meeting:** UPC–USA, Universitat Politècnica de Catalunya – Universidad Sergio Arboleda  
**Place:** Bogotá, Colombia **Date:** July 13–15, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Hamiltonian systems and variational equations with polynomial coefficients  
**Kind of participation:** Short talk  
**Name of the Meeting:** Fifth International Conference in Dynamic Systems and Applications

**Kind of Meeting:** IFNA: International Federation of Nonlinear Analysts  
**Place:** Atlanta, Georgia **Date:** May 30 – June 2, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Non-Autonomous Hamiltonian Systems and Morales-Ramis Theory  
**Kind of participation:** Short talk  
**Name of the Meeting:** SIAM meeting on Dynamical Systems

**Kind of Meeting:** SIAM: Society for Industrial and Applied Mathematics

**Place:** Snowbird, Salt Lake City, USA

**Date:** May 28–June 1, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Galois theory and spectral theory  
**Kind of participation:** Short talk  
**Name of the Meeting:** AMS special session in differential algebra

**Kind of Meeting:** AMS: American Mathematical Society

**Place:** Hoboken, New York, USA

**Date:** April 14–15, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Non integrability of some hamiltonians with rational potential  
**Kind of participation:** Poster  
**Name of the Meeting:** Workshop in differential algebra and related topics

**Kind of Meeting:** KASDA: Kolchin Academic Seminar in Differential Algebra

**Place:** Newark, New Jersey, USA

**Date:** April 12–15, 2007

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**Speakers:** P. Acosta-Humánez  
**Title:** Non integrability of some hamiltonians with rational potential  
**Kind of participation:** Long talk  
**Name of the Meeting:** Hamilton Meeting about integrability

**Kind of Meeting:** ANR: Agence Nationale de la Recherche

**Place:** Limoges, Francia

**Date:** July 3–6, 2006

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**Speakers:** P. Acosta-Humánez  
**Title:** Non integrability of some hamiltonians with rational potential  
**Kind of participation:** Poster  
**Name of the Meeting:** Carles Simó Fest

**Kind of Meeting:** BDSG: Barcelona Dynamical System Group

**Place:** Sagaró, Barcelona

**Date:** May 29–June 3, 2006

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Speakers: P. Acosta-Humánez  
Title: Morales-Ramis Theory and Kovacic's Algorithm  
Kind of participation: Short talk  
Name of the Meeting: Congreso Colombiano de Matemáticas

Kind of Meeting: National

Place: Bogota, Colombia

Date: August 8–12, 2005

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Speakers: P. Acosta-Humánez  
Title: An application of functional analysis in a predator-prey system  
Kind of participation: Short talk  
Name of the Meeting: Fourth International Conference in Dynamic Systems and Applications

Kind of Meeting: IFNA: International Federation of Nonlinear Analysts

Place: Atlanta, Georgia

Date: May 21–24, 2003

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Speakers: P. Acosta-Humánez  
Title: Some Homomorphisms in discrete dynamical systems  
Kind of participation: Short talk  
Name of the Meeting: Dynamical Systems

Kind of Meeting: Local, organized by the University of North Texas

Place: Denton, Texas

Date: May 25–29, 2003

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## Awards

### Summa Cum Laude:

- Bachelor Dissertation *Grupos Diedros y del tipo  $(p, q)$* , 2004, Universidad Sergio Arboleda
- PhD Thesis with European Label *Galoisian Approach to Supersymmetric Quantum Mechanics*, 2009, Universitat Politècnica de Catalunya

## Grants

- FPI scholarship, granted by the Spanish Government from August 1, 2005 to July 31, 2009 (48.000 Euros).
- Grant as invited researcher (postdoctoral) by Institute XLim (Université de Limoges) from September 1, 2008 to September 21, 2009 (4.000 Euros).
- Stay research 2009, granted by the Spanish Government from February 1 to July 30 2009 (10.300 Euros).
- Stay research 2008, granted by the Spanish Government from February 1 to July 30 2008 (9.800 Euros).
- Stay research 2007, granted by the Spanish Government from June 7 to August 30 2007 (4.710 Euros).