

CURRICULUM VITAE

Name: Romero Ibáñez	First Name: Ana
ID card: 16597051-K	Date of birth: 25/08/1979 Gender: F

Professional status

Organization: Universidad de La Rioja (Spain)
Faculty: Facultad de Ciencias, Estudios Agroalimentarios e Informática
Department: Matemáticas y Computación
Address: Edificio Vives
C/ Luis de Ulloa s/n
26004 Logroño - Spain
Telephone number: (+34)941 299 438
Fax: (+34)941 299 460
e-mail: ana.romero@unirioja.es

Specialization (UNESCO code): 1203

Position: Assistant Professor

Starting date: 13/11/2007

Research interests

Symbolic Computation, Homological Algebra, Computacional Topology, Programming.

Academic degrees

Higher Education	Institution	Date
Bachelor in Mathematics	Universidad de La Rioja (Spain)	June 2003
Diploma de Estudios Avanzados	Universidad de La Rioja	July 2005
Diploma de Estudios Avanzados	Universidad de Zaragoza (Spain)	September 2005
Certificado de Aptitud Pedagógica	Universidad de La Rioja	February 2004

Doctorate	Institution	Date
Doctor	Universidad de La Rioja	13/11/2007

Previous experience in research or professional positions

Position	Institution	Date
Research collaboration grant	Universidad de La Rioja, Departamento de Matemáticas y Computación.	Course 2002/2003
Collaboration grant for the design of the academic program of the degree of Mathematics, ANECA	Universidad de La Rioja, Departamento de Matemáticas y Computación.	20/11/03 – 20/01/04
Predoctoral research grant (Program “Formación de Profesorado Universitario” of the Spanish government)	Universidad de La Rioja, Departamento de Matemáticas y Computación.	01/02/04 – 16/09/07
Assistant Teacher	Universidad de Zaragoza, Departamento de Informática e Ingeniería de Sistemas	17/09/07 – 11/11/07

Languages (R=regular, G=good, C=correct)

Language	Speaking	Reading	Writing
English	G	C	C
French	G	C	G
German	R	R	R

Participation in Research Projects

Title: Entornos de especificación y programación para sistemas de cálculo simbólico.
Funding organization: MCyT and FEDER (TIC2002-01626)
Participating institutions: Universidad de La Rioja
Starting date: 2003 expiring date: 2005 Amount: 28474 euros
Principal investigator: Julio Rubio García
Number of researchers: 10

Title: Red Temática de Cálculo Simbólico, Álgebra Computacional y Aplicaciones
Funding organization: Dirección General de Investigación (MTM2004-21958-E)
Participating institutions: Universidad de Alcalá, Universidad de Cantabria, Universidad Complutense de Madrid, Universidad de Granada, Universidad de La Laguna, Universidad Politécnica de Cataluña, Universidad de La Rioja, Universidad de Sevilla, Universidad de Valladolid
Starting date: 2005 expiring date: 2007
Principal investigator: Tomás Recio Muñiz
Number of researchers:

Title: Global Integrability of Field Theories (GIFT)
Funding organization: NEST (New and Emerging Science and Technology), program FP6 of the European Union
Participating institutions: Universität Karlsruhe, Ruprecht-Karls-Universität (Heidelberg), Université Joseph Fourier (Grenoble), Vrije Universiteit Amsterdam, Lancaster University, Université Paul Sabatier (Toulouse).
Starting date: 2005 expiring date: 2006 Amount: 950 000 €
Principal investigator: Jacques Calmet
Number of researchers:

Title: Programación con componentes fiables para el Cálculo Simbólico
Funding organization: Comunidad Autónoma de La Rioja (ANGI-2005/19).
Participating institutions: Universidad de La Rioja
Starting date: 2006 expiring date: 2007 Amount: 9600€
Principal investigator: Julio Rubio García
Number of researchers: 11

Title: Sistemas de Cálculo Simbólico: nuevos desarrollos en Topología Algebraica y fiabilidad
Funding organization: Ministerio de Educación y Ciencia (MTM2006-06513).
Participating institutions: Universidad de La Rioja
Starting date: 2007 expiring date: 2009 Amount: 21780€
Principal investigator: Julio Rubio García
Number of researchers: 6

Publications

(KEYS: B = complete book, BC = book chapter, P = paper, R = review, E = editor, TR = technical report)

Authors (in order of appearance): M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: On the role of distributed computing in Symbolic Computation for Algebraic Topology
Ref. journal: book: Proceedings EACA 2004
Key: P Volume: Pages, start: 11 end: 15 Date: 2004
Publisher: Universidad de Cantabria
Place of publication: Santander (Spain)

Authors (in order of appearance): M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: Remote access to a Symbolic Computation system for Algebraic Topology: a client-server approach
Ref. journal: Lecture Notes in Computer Science book:
Clave: P Volume: 3516 Pages, start: 635 end: 642 Date: 2005
Publisher: Springer
Place of publication:

Authors (in order of appearance): A. Romero
Title: Effective Homology of Free Simplicial Abelian Groups: the Acyclic Case
Ref. journal: book: Proceedings EACA 2006
Clave: P Volume: Pages, start: 143 end: 146 Date: 2006
Publisher: Universidad de Sevilla
Place of publication: Sevilla (Spain)

Authors (in order of appearance): A. Romero, J. Rubio, F. Sergeraert
Title: Computing Spectral Sequences
Ref. journal: Journal of Symbolic Computation book:
Clave: P Volume: 41(10) Pages, start: 1059 end: 1079 Date: 2006
Publisher: Elsevier
Place of publication:

Authors (in order of appearance): A. Romero
Title: From Homological Perturbation to Spectral Sequences: a Case Study
Ref. journal: book: Proceedings GIFT 2006
Clave: P Volume: Pages, start: 289 end: 309 Date: 2006
Publisher: Universitätsverlag Karlsruhe
Place of publication:

Authors (in order of appearance): A. Romero.
Title: Homología Efectiva y Sucesiones Espectrales (tesis doctoral)
Ref. journal: book:
Clave: B Volume: Pages, start: end: Date: 2008
Publisher: Universidad de La Rioja
Place of publication:

Authors: A. Romero.

Title: Effective homology and spectral sequences (dissertation)

Ref. journal : book:

Clave: B Volume: Pages, start: end: Date: 2008

Publisher: Proquest

Place of publication: EEUU

Authors: A. Romero.

Title: An algorithm computing the first two levels of the Bousfield-Kan spectral sequence

Ref. revista : book: Proceedings EACA 2008

Clave: BC Volume: Pages, start: 85 end: 88 Date: 2008

Publisher: Universidad de Granada

Place of publication: Granada

Authors: A. Romero, G. Ellis, J. Rubio.

Title: Interoperating between Computer Algebra systems: computing homology of groups with Kenzo and GAP

Ref. revista : book: Proceedings ISSAC 2009

Clave: BC Volume: Pages, start: 303 end: 310 Date: 2009

Publisher: ACM

Place of publication: New York

Participation in Conferences

Authors: M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: On the role of distributed computing in Symbolic Computation for Algebraic Topology
Kind of participation: Communication
Conference: IX Encuentro de Álgebra Computacional y Aplicaciones (EACA 2004)
Publication: Universidad de Cantabria, p.p. 11-15
Location: Santander (Spain) Date: 2004

Authors: M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: Distributed Computing in Algebraic Topology: first trials and errors, first programs
Kind of participation: Poster
Conference: International Symposium on Symbolic and Algebraic Computation (ISSAC 2004)
Publication: Poster Abstracts, p.p. 3-5
Location: Santander (Spain) Date: 2004

Authors: M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: Distributed Computing in Algebraic Topology: first trials and errors, first programs
Kind of participation: Communication
Conference: Internet Accessible Mathematical Computation (IAMC 2004)
Publication: Electronic Proceedings, <http://www.orcca.on.ca/conferences/iamc2004/abstracts/index.html>
Location: Santander (Spain) Date: 2004

Authors: M. Andrés, V. Pascual, A. Romero, J. Rubio
Title: Remote access to a Symbolic Computation system for Algebraic Topology: a client-server approach
Kind of participation: Communication
Conference: Computer Algebra Systems and their Applications (CASA 2005)
Publication: Lecture Notes in Computer Science 3516, p.p. 635-642
Location: Atlanta (USA) Date: 2005

Authors: A. Romero
Title: An algorithm computing spectral sequences
Kind of participation: Invitation
Conference: Colloque du GDR "Topologie Algébrique et Applications"
Publication: [without proceedings]
Location: Lille (France) Date: 2005

Authors: A. Romero
Title: A constructive framework for spectral sequences
Kind of participation: Poster
Conference: Mathematics, Algorithms, Proofs (MAP 2006)
Publication: [without proceedings]
Location: Castro Urdiales (Spain) Date: 2006

Authors: A. Romero, J. Rubio, F. Sergeraert
Title: Computing Spectral Sequences with the Kenzo system
Kind of participation: Communication
Conference: International Congress of Mathematicians (ICM 2006), sección of Mathematical Software
Publication:
Location: Madrid (Spain) Date: 2006

Authors: A. Romero
Title: Effective Homology of Free Simplicial Abelian Groups: the Acyclic Case
Kind of participation: Communication
Conference: X Encuentro de Álgebra Computacional y Aplicaciones (EACA 2006)
Publication: Universidad de Sevilla, pp. 143-146.
Location: Sevilla (Spain) Date: 2006

Authors: A. Romero
Title: From Homological Perturbation to Spectral Sequences: a Case Study
Kind of participation: Communication
Conference: Global Integrability of Field Theories and Applications (GIFT 2006)
Publication: Universitätsverlag Karlsruhe, pp. 289-309
Location: Daresbury (UK) Date: 2006

Authors: A. Romero
Title: Constructive spectral sequences
Kind of participation: Invitation
Conference: Mathematics, Algorithms, Proofs (MAP 2007)
Publication: [without proceedings]
Location: Leiden (Netherlands) Date: 2007

Authors: A. Romero
Title: Effective homology and spectral sequences
Kind of participation: Invitation
Conference: I French-Spanish Congress of Mathematics, section of Constructive Mathematics and Symbolic Computation
Publication: [without proceedings]
Location: Zaragoza (Spain) Date: 2007

Authors: A. Romero.
Title: An algorithm computing the first two levels of the Bousfield-Kan spectral sequence
Kind of participation: Communication
Conference: XI Encuentro de Álgebra Computacional y Aplicaciones (EACA 2008)
Publication: Proceedings EACA 2008, Universidad de Granada, pp. 85-88
Location: Granada (Spain) Date: 09/2008

Authors: A. Romero, G. Ellis, J. Rubio.
Title: Interoperating between Computer Algebra systems: computing homology of groups with Kenzo and GAP
Kind of participation: Communication
Conference: International Symposium on Symbolic and Algebraic Computation (ISSAC 2009)
Publication: Proceedings ISSAC 09, ACM, pp. 303-310.
Location: Seoul (South Korea) Date: 07/2009

Research stays in foreign countries

(KEY: D = predoctoral, P = postdoctoral, G = guest, UC = under contract)

Institution: Institut Fourier (Université Joseph Fourier)
Location: Grenoble Country: France Date: 2005 (August-November) Length (in weeks): 17
Subject: Symbolic Computation in Algebraic Topology Key: D

Institution: Institut Fourier (Université Joseph Fourier)
Location: Grenoble Country: France Date: 2006 (September-December) Length (in weeks): 12
Subject: Symbolic Computation in Algebraic Topology Key: D

Institution: National University of Ireland, Galway
Location: Galway Country: Ireland Date: 01/02/2008 - 29/02/2008 Length (in weeks): 4
Subject: Symbolic computation and homology of groups Key: P

Other merits

- Speaker of the talk "The Kenzo system for Algebraic Topology". Seminary of Computational Algebra of the National University of Ireland, Galway. 05/02/2008.
- Speaker of the talk "Spectral Sequences: Uses, Problems and Computations". Seminary of Mathematics at the National University of Ireland, Galway. 19/02/2008.
- Speaker of the talk "Homologie effective et calcul des suites spectrales". Seminary of Topology at the Institut Fourier of Grenoble (France). November 18, 2005.
- Speaker of the talk "Introducción a MathML". Seminary of Computer Science of the Departamento de Matemáticas y Computación at the Universidad de La Rioja. May 19, 2003.
- Participation in the conference of Topology on the honor of Francis Sergeraert. Grenoble. May 26 and 27, 2005.
- Participation in the Workshop on Symbolic Computation and Formal Methods. Universidad de La Rioja. April 5 and 6, 2006.
- Participation in the Summer School "Mathematics, Algorithms, Proofs". Génova (Italy), August 28 - September 2, 2006.