



## Matemática Aplicada

**Áreas de conocimiento:** Matemática Aplicada

**Director:** Miguel Ángel Piñar González

**Secretaria:** Julia García Cabello

**Página web:** <https://mateapl.ugr.es>

**Profesorado:** CU: 9, PTU: 33, PTEU: 1, PDI Contratado y Otros: 7.

### Tesis leídas

- Some Problems On Prescribed Mean Curvature And Kinematics In General Relativity

Doctorando: Daniel de la Fuente Benito

Director: Pedro José Torres Villarroya, Alfonso Romero Sarabia

Fecha de lectura: 24/05/2016

- Ecuaciones de evolución para sistemas complejos en ciencias de la vida y teoría cinética

Doctorando: Luis A. Urrutia Matarán

Director: Juan José Nieto Muñoz

Fecha de lectura: 12/01/2017

### Grupos de Investigación.

FQM359 ANÁLISIS NUMÉRICO Y SUS APLICACIONES

- Responsable: MANUEL RUIZ GALÁN

FQM316 ECUACIONES DE EVOLUCIÓN EN DERIVADAS PARCIALES

- Responsable: JUAN SOLER

FQM183 ECUACIONES DIFERENCIALES

- Responsable: RAFAEL ORTEGA RÍOS

FQM191 MATEMATICA APLICADA

- Responsable: MIGUEL PASADAS FERNANDEZ

FQM384 Ortogonalidad y Aplicaciones

- Responsable: TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

### Dirección y participación en Proyectos I+D

- 2016 Talento Matemático, , 01/01/2016-01/12/2016

Responsable MIGUEL LUIS RODRÍGUEZ GONZÁLEZ

- 2016 Polinomios Ortogonales, Aproximación y Fórmulas de Cuadratura. Aplicaciones., , 01/01/2016-31/12/2019

Investigador/a JOAQUÍN SÁNCHEZ LARA

- 2016 Modelización y análisis multiescala en biología de sistemas y biomedicina, , 01/01/2016-31/12/2018

Investigador/a JUAN CALVO YAGÜE

- 2016 Desigualdades minimax: fundamentos y aplicaciones a optimización y problemas inversos, , 30/12/2016-29/12/2019

Investigador/a ANA ISABEL GARRALDA GUILLEM

- 2016 AVANCES EN ARQUITECTURAS DE COMPUTO PARA APRENDIZAJE AUTOMATICO UTILIZANDO

FUENTES HETEROGENEAS: APLICACIONES EN SALUD Y BIENESTAR, , 01/01/2016-31/12/2018

Investigador/a OLGA VALENZUELA CANSINO

- 2016 ESTUDIO MULTIDISCIPLINAR DE PROCESOS ALTAMENTE ENERGETICOS EN EYECCIONES

ASTROFISICAS: FUENTES GALACTICAS MULTI-LONGITUD DE ONDA, , 30/12/2016-29/12/2019

Investigador/a JOSÉ MARTÍNEZ AROZA

- 2016 Estudio Multidisciplinar de Procesos Altamente Energéticos en Eyecciones Astrofísicas: Fuentes Galácticas Multi-Longitud de Onda, Competitivo, 30/12/2016-29/12/2019

Investigador/a JOSÉ MARTÍNEZ AROZA

- 2016 TALENTO MATEMATICO, Competitivo, 01/01/2016-31/12/2016

Responsable MIGUEL LUIS RODRÍGUEZ GONZÁLEZ

- 2016 TEORIAS EFECTIVAS DE COSMOLOGIA Y GRAVEDAD, Competitivo, 30/12/2016-29/12/2019

Investigador/a PABLO SANCHEZ MORENO

- 2016 DESIGUALDADES MINIMAX: FUNDAMENTOS Y APLICACIONES A OPTIMIZACION Y PROBLEMAS INVERSOS, Competitivo, 30/12/2016-29/12/2019

Responsable MANUEL RUIZ GALÁN

Investigador/a MARIA ISABEL BERENGUER MALDONADO

Investigador/a DOMINGO GÁMEZ DOMINGO

### Contratos de investigación

- 2016 Contrato Predoctoral FPU 2015, , 31/10/2016-30/10/2020

Investigador/a CLAUDIA GARCÍA LÓPEZ



**Publicaciones en revistas**

- 2017 Artículo: On the Sobolev orthogonality of classical orthogonal polynomials for non classical parameters, Rocky Mountain Journal of Mathematics, 47, 1, 267-288  
JOAQUÍN SÁNCHEZ LARA
- 2017 Artículo: Sound branch cash management for less: a low-cost forecasting algorithm under uncertain demand, Omega : the International Journal of Management Science, 70, C, 118-134  
JULIA GARCÍA CABELLO
- 2017 Artículo: Parallelizing drainage network algorithm using free software: Octave as a solution, Mathematics and Computers in Simulation, 137, , 424-430  
MARÍA JOSÉ IBÁÑEZ PÉREZ
- 2017 Artículo: The evaluation problem in discrete semi-hidden Markov models, Mathematics and Computers in Simulation, 137, , 350-365  
JOSÉ MARTÍNEZ AROZA
- 2017 Artículo: Delocalization properties at isolated avoided crossings in Lipkin-Meshkov-Glick type Hamiltonian models,, Journal of Statistical Mechanics: Theory and Experiment, , , 013101-  
MANUEL CALIXTO MOLINA
- 2017 Artículo: Bivariate orthogonal polynomials, 2D Toda lattices and Lax-type pairs, Applied Mathematics and Computation, 309, , 142-155.  
TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ
- 2017 Artículo: Three term relations for a class of bivariate orthogonal polynomials, Mediterranean Journal of Mathematics, 14, 2, 1-26  
MIGUEL ÁNGEL PIÑAR GONZÁLEZ
- TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ
- 2017 Artículo: One-Parameter Fisher-Rényi Complexity: Notion and Hydrogenic Applications, Entropy, 19, , 16-  
PABLO SANCHEZ MORENO
- 2017 Artículo en prensa: Best Polynomial Approximation on the Unit Ball, IMA Journal of Numerical Analysis, , , -  
MIGUEL ÁNGEL PIÑAR GONZÁLEZ
- 2017 Artículo: Qualitative behavior for flux-saturated mechanisms: traveling waves, waiting time and smoothing effects, Journal of the European Mathematical Society, 19, , 441-472  
JUAN CALVO YAGÜE
- JUAN CAMPOS RODRÍGUEZ
- JUAN SOLER
- ÓSCAR SÁNCHEZ ROMERO
- 2017 Artículo: Blow-up, steady states and long time behaviour of excitatory-inhibitory nonlinear neuron models, Kinetic and Related Models, 10, 3, 587-612  
MARÍA JOSÉ CÁCERES GRANADOS
- RICARDA SCHNEIDER
- 2017 Artículo: Hermite spline interpolation on a three direction mesh from Powell-Sabin and Hsieh-Clough-Tocher finite elements, Journal of Computational and Applied Mathematics, 318, , 565-579  
DOMINGO BARRERA ROSILLO
- MARÍA JOSÉ IBÁÑEZ PÉREZ
- 2017 Artículo: Polynomial pattern finding in scattered data, Journal of Computational and Applied Mathematics, 318, , 107-116  
DOMINGO BARRERA ROSILLO
- MARÍA JOSÉ IBÁÑEZ PÉREZ
- RAFAEL JOSÉ YÁÑEZ GARCÍA
- 2017 Artículo: On the construction of trivariate near-best quasi-interpolants based on C2 quartic splines on type-6 tetrahedral partitions, Journal of Computational and Applied Mathematics, 311, , 252-261  
DOMINGO BARRERA ROSILLO
- MARÍA JOSÉ IBÁÑEZ PÉREZ
- 2017 Artículo: Study on convergence and error of a numerical method for solving systems of nonlinear Fredholm-Volterra integral equations of Hammerstein type, Applicable analysis, 96, 3, 516-527  
DOMINGO GÁMEZ DOMINGO
- MARÍA ISABEL BERENGUER MALDONADO
- 2017 Artículo: Solution of systems of integro-differential equations using numerical treatment of fixed point, Journal of Computational and Applied Mathematics, 315, , 343-353  
ANTONIO LÓPEZ LINARES
- DOMINGO GÁMEZ DOMINGO
- MARÍA ISABEL BERENGUER MALDONADO
- 2017 Artículo: A computational method for solving a class of two dimensional Volterra integral equations, Journal of Computational and Applied Mathematics, 318, , 403-410  
DOMINGO GÁMEZ DOMINGO
- MARÍA ISABEL BERENGUER MALDONADO



- 2017 Artículo: Copulas with given values on the tails, International Journal of Approximate Reasoning, 85, , 59-67  
JOSÉ JUAN QUESADA MOLINA
- 2017 Artículo: Numerical semigroups in a problem about cost-effective transport, Forum Mathematicum, 29, 2, 329-345  
AURELIANO MATÍAS ROBLES PÉREZ
- 2017 Artículo: The Frobenius number in the set of numerical semigroups with fixed multiplicity and genus, International Journal of Number Theory, 13, 4, 1003-1011  
AURELIANO MATÍAS ROBLES PÉREZ
- 2017 Artículo: On the (non-)uniqueness of the Levi-Civita solution in the Einstein-Hilbert-Palatini formalism, Physics letters. B, 768, , 280-287  
PABLO SANCHEZ MORENO
- 2017 Artículo: Existence and multiplicity of entire radial spacelike graphs with prescribed mean curvature function in certain Friedmann-Lemaître-Robertson-Walker spacetimes, Communications in Contemporary Mathematics, 19, 2, -  
PEDRO JOSÉ TORRES VILLARROYA
- 2017 Artículo: Existence and extendibility of rotationally symmetric graphs with a prescribed higher mean curvature function in Euclidean and Minkowski spaces, Journal of Mathematical Analysis and Applications, 446, , 1046-1059  
PEDRO JOSÉ TORRES VILLARROYA
- 2017 Artículo: Uniform circular motion in General Relativity: Existence and extendibility of the trajectories, Classical and Quantum Gravity, , , -  
PEDRO JOSÉ TORRES VILLARROYA
- 2017 Artículo: First integrals for the Kepler problem with linear drag, Celestial Mechanics and Dynamical Astronomy, 127, , 35-48  
RAFAEL ORTEGA RÍOS
- 2017 Artículo en prensa: Asymptotic behaviour of the Christoffel functions on the Unit Ball in the presence of a Mass on the Sphere, Journal of Approximation Theory, , , -  
MARIA CLOTILDE MARTINEZ ALVAREZ
- MIGUEL ÁNGEL PIÑAR GONZÁLEZ
- 2017 Artículo en prensa: Elementary convex techniques for equilibrium, minimax and variational problems, Optimization Letters, , , -  
MANUEL RUIZ GALÁN
- 2017 Artículo en prensa: A theorem of the alternative with an arbitrary number of inequalities and quadratic programming, Journal of Global Optimization, , , -  
MANUEL RUIZ GALÁN
- 2017 Artículo: Filling holes with volume constraints, Computers and Mathematics with Applications, , , -  
ANTONIO PALOMARES BAUTISTA
- MIGUEL ÁNGEL FORTES ESCALONA
- MIGUEL PASADAS FERNANDEZ
- PEDRO GONZÁLEZ RODELAS
- 2017 Artículo: Euler-type equations and commutators in singular and hyperbolic limits of kinetic Cucker-Smale models, Mathematical Models and Methods in Applied Sciences, , , -  
JESÚS DAVID POYATO SÁNCHEZ
- JUAN SOLER
- 2017 Artículo: Numerical approximation using evolution PDE variational splines, Numerical Methods for Partial Differential Equations, , , -  
ABDELOUAHED KOUIBIA KRICHI
- MIGUEL PASADAS FERNANDEZ
- 2016 Artículo: A class of orthogonal functions given by a three term recurrence formula, Mathematics of Computation, 85, 300, 1837-1859  
TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ
- 2016 Artículo: Minimizing B-spline knots in representative road axis from GPS points cloud, Mathematical Methods in the Applied Sciences, 39, 16, 4773-4779  
DOMINGO BARRERA ROSILLO
- 2016 Artículo: A fitted B-spline method to derive a representative 3D axis from a set of multiple road traces, Geocarto International, 31, 8, 1-13  
DOMINGO BARRERA ROSILLO
- 2016 Artículo: Monotone measures of statistical complexity, Physics Letters A, 380, , 377-380  
PABLO SANCHEZ MORENO
- 2016 Artículo: Independence results for multivariate tail dependence coefficients, Fuzzy Sets and Systems, 284, , 129-137  
JOSÉ JUAN QUESADA MOLINA
- 2016 Artículo: Diagonal plane sections of trivariate copulas, Information Sciences, 333, , 81-87



JOSÉ JUAN QUESADA MOLINA

- 2016 Artículo: Sobolev orthogonal polynomials on the unit ball via outward normal derivatives, *Journal of Mathematical Analysis and Applications*, 440, , 716-740

ANTONIA MARÍA DELGADO AMARO

LIDIA FERNÁNDEZ RODRÍGUEZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Artículo en prensa: Matrix Pearson equations satisfied by Koornwinder weights in two variables, *Acta applicandae mathematicae*, , , -

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Artículo: Orthogonal polynomials on the unit ball and fourth order partial differential equations, *Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)*, 12, 20, 1-11

MARIA CLOTILDE MARTINEZ ALVAREZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2016 Artículo: A new parameter to characterize the charge transport regime in Ni/HfO<sub>2</sub>/Si-n+-based RRAMs, *Solid-State Electronics*, 118, , 56-60

DOMINGO BARRERA ROSILLO

PEDRO GONZÁLEZ RODELAS

- 2016 Artículo: Galerkin method for constrained variational equations and a collage-based approach to related inverse problems, *Journal of Computational and Applied Mathematics*, 292, , 67-75

MANUEL RUIZ GALÁN

MARIA ISABEL BERENGUER MALDONADO

- 2016 Artículo: Multivariate Orthogonal Polynomials and Modified Moment Functionals, *Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)*, 12, 090, 1-25

ANTONIA MARÍA DELGADO AMARO

LIDIA FERNÁNDEZ RODRÍGUEZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Artículo: Band-to-band tunneling distance analysis in the heterogate electron-hole bilayer tunnel field-effect transistor, *Journal of Applied Physics. American Institute of Physics*, 119, 4, 045705-1-045705-5

ANTONIO PALOMARES BAUTISTA

- 2016 Artículo: A non-Markovian phase space approach to Schrödinger dynamics: The space-time Wigner transform, *Multiscale modeling & simulation (Print)*, 14, 1, 430-451

JOSÉ LUIS LÓPEZ FERNÁNDEZ

JUAN SOLER

- 2016 Artículo: The optimum shape of an arch under non-symmetric loading conditions, *Archive of Applied Mechanics*, , , 1-12

ANTONIO PALOMARES BAUTISTA

MIGUEL PASADAS FERNANDEZ

- 2016 Artículo: A multiscale model of cell mobility: From a kinetic to a hydrodynamic description, *Journal of Mathematical Analysis and Applications*, 432, 2, 1055-1071

JUAN JOSÉ NIETO MUÑOZ

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Artículo: About the kinetic description of fractional diffusion equations modeling chemotaxis, *Mathematical Models and Methods in Applied Sciences (M3AS)*, 26, 2, 249-268

JUAN JOSÉ NIETO MUÑOZ

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Artículo: Analysis of kinetic and macroscopic models of pursuit-evasion dynamics, *Communications in Mathematical Sciences*, 14, 8, 2253-2286

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Corrección: Corrigendum on "A multiscale model of cell mobility: From a kinetic to a hydrodynamic description", *Journal of Mathematical Analysis and Applications*, 435, 1, 1014-1014

JUAN JOSÉ NIETO MUÑOZ

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Otro tipo de publicación en revista: Information on living systems: A kinetic approach, *Physics of life Reviews*, 16, , 156-157

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Artículo: The (Kinetic) Theory of Active Particles applied to Learning Dynamics, *Physics of life Reviews*, 16, March 2016, 152-153

JUAN JOSÉ NIETO MUÑOZ

- 2016 Artículo: Pattern formation in a flux limited reaction-diffusion equation of porous media type, *Inventiones Mathematicae*, 206, , 57-108



JUAN CALVO YAGÜE

JUAN CAMPOS RODRÍGUEZ

JUAN SOLER

ÓSCAR SÁNCHEZ ROMERO

- 2016 Artículo: A sharp Lagrange multiplier theorem for nonlinear programs, *Journal of Global Optimization*, 65, 3, 513-530

MANUEL RUIZ GALÁN

- 2016 Artículo: Comment on "Optimization of a Pocketed Dual-Metal-Gate TFET by Means of TCAD Simulations Accounting for Quantization-Induced Bandgap Widening", *IEEE Transactions on Electron Devices*, 63, 12, 5077-5078

ANTONIO PALOMARES BAUTISTA

- 2016 Artículo: The whole and its parts: On the coherence theorem of Balinski and Young, *Mathematical Social Science*, 83, , 11-19

ANTONIO PALOMARES BAUTISTA

VICTORIANO RAMÍREZ GONZÁLEZ

- 2016 Artículo: Numerical semigroups with a given set of pseudo-Frobenius numbers, *LMS Journal of Computation and Mathematics*, 19, 1, 186-205

AURELIANO MATÍAS ROBLES PÉREZ

- 2016 Artículo: The genus, Frobenius number and pseudo-Frobenius numbers of numerical semigroups of type 2, *Proceedings of the Royal Society of Edinburgh, Section: A Mathematics*, 146, 5, 1081-1090

AURELIANO MATÍAS ROBLES PÉREZ

- 2016 Artículo: Inverse-free recursive multiresolution algorithms for a data approximation problem, *Computers and Mathematics with Applications*, 72, , 1177-1187

MIGUEL ÁNGEL FORTES ESCALONA

- 2016 Artículo: Prescribed mean curvature graphs with Neumann boundary conditions in some FLRW spacetimes, *Journal of Differential Equations*, 261, 12, 7145-7156

PEDRO JOSÉ TORRES VILLARROYA

- 2016 Artículo: Existence and uniqueness of limit cycles for generalized phi-Laplacian Liénard equations, *Journal of Mathematical Analysis and Applications*, 439, 2, 745-765

PEDRO JOSÉ TORRES VILLARROYA

- 2016 Artículo: Twist periodic solutions for differential equations with a combined attractive-repulsive singularity, *Journal of Mathematical Analysis and Applications*, 437, 2, 1070-1083

PEDRO JOSÉ TORRES VILLARROYA

- 2016 Artículo: Chaotic dynamics of the Kepler problem with oscillating singularity, *Advanced Nonlinear Studies*, 16, 3, 551-567

PEDRO JOSÉ TORRES VILLARROYA

- 2016 Artículo: Coherent states for N-component fractional quantum Hall systems and their nonlinear sigma models, *Annals of physics (Print)*, 373, , 52-66

MANUEL CALIXTO MOLINA

- 2016 Artículo: Some aspects on kinetic modeling of evacuation dynamics: Comment on "Human behaviours in evacuation crowd dynamics: From modelling to 'big data' toward crisis management" by Nicola Bellomo et al., *Physics of life Reviews*, 18, September 2016, 42-43

JUAN CALVO YAGÜE

JUAN JOSÉ NIETO MUÑOZ

- 2016 Artículo en prensa: Parabolic equations in time dependent domains, *Journal of Evolution Equations*, , , 1-24

JUAN CALVO YAGÜE

- 2016 Artículo: Modeling social crowds, Comment on "Human behaviours in evacuation crowd dynamics: From modelling to "big data" toward crisis management", by N. Bellomo et al, *Physics of life Reviews*, 18, , 50-52

JESÚS DAVID POYATO SÁNCHEZ

JUAN SOLER

- 2016 Artículo: Nonlinear programming via König's maximum theorem, *Journal of Optimization Theory and Applications*, 170, 3, 838-852

MANUEL RUIZ GALÁN

- 2016 Artículo: The Gordan theorem and its implications for minimax theory, *Journal of Nonlinear and Convex Analysis*, 17, 12, 2385-2405

MANUEL RUIZ GALÁN

- 2016 Artículo: The Fokker-Planck equation for bosons in 2D: well-posedness and asymptotic behaviour, *Nonlinear Analysis, Theory, Methods & Applications*, 137, , 291-305

JOSÉ ALFREDO CAÑIZO RINCÓN

- 2016 Artículo: Phase transitions in a kinetic flocking model of Cucker-Smale type, *Multiscale modeling & simulation (Print)*, 14, 3, 1063-1088

JOSÉ ALFREDO CAÑIZO RINCÓN

- 2016 Artículo: Exponential trend to equilibrium for the inelastic Boltzmann equation driven by a particle bath,



Nonlinearity, 5, 29, 1687-1715

JOSÉ ALFREDO CAÑIZO RINCÓN

- 2016 Artículo: Main findings and advances in biomedical engineering and bioinformatics from IWBBIO 2015, BioMedical Engineering Online, 15, 1, -

OLGA VALENZUELA CANSINO

- 2016 Artículo: Periodic solutions of singular equations, Topological Methods in Nonlinear Analysis, 47, 1, 55-72 ANTONIO JESÚS UREÑA ALCÁZAR

- 2016 Artículo: A BGK relaxation model for polyatomic gas mixtures, Communications in Mathematical Sciences, 14, 2, 297-325

MARÍA JOSÉ CÁCERES GRANADOS

- 2016 Artículo: Symmetric periodic solutions in the Sitnikov problem, Archiv der Mathematik (Printed ed.), 107, , 405-412

RAFAEL ORTEGA RÍOS

- 2016 Artículo: Periodic solutions of a perturbed Kepler problem in the plane: from existence to stability, Journal of Differential Equations, 261, , 2528-2551

RAFAEL ORTEGA RÍOS

- 2016 Artículo: Qualitative behavior and traveling waves for flux-saturated porous media equations arising in optimal mass transportation, Nonlinear Analysis, Theory, Methods and Applications, 137, , 266-290

JUAN CAMPOS RODRÍGUEZ

JUAN SOLER

- 2016 Artículo: Minimax Theory and its Applications, Minimax Theory and its Applications, 1, , 111-124

MANUEL RUIZ GALÁN

#### Libros (con ISBN)

- 2016 Matemáticas Imprescindibles en la Administración de Empresas: Editorial Avicam Fleming, , 2016, ISBN:978-84-16535-59-0

JULIA GARCÍA CABELLO

- 2016 Matemáticas para economía y administración y dirección de empresas: Godel, , 2016, 974-84-16929-02-3 MIGUEL ÁNGEL FORTES ESCALONA

#### Capítulos de libros (con ISBN)

- 2017 Titulo Capítulo: The r-DP Methods to allocate the seats to member States, Titulo Libro: The Composition of the European parliament: Policy Department for Citizens' Rights and Constitutional Affairs, , 2017, VICTORIANO RAMÍREZ GONZÁLEZ

- 2017 Titulo Capítulo: The r-DP Methods to allocate the seats to member States, Titulo Libro: The Composition of the European Parliament: Policy Department for Citizens' Rights and Constitutional Affairs PE 583.117, , 2017, VICTORIANO RAMÍREZ GONZÁLEZ

- 2016 Titulo Capítulo: Associative Copulas: A Survey, Titulo Libro: Fuzzy Logic and Information Fusion (T. Calvo Sánchez and J. Torrens Sastre, Eds.). Studies in Fuzziness and Soft Computing: Springer, , 2016, 978-3-319-30419-9

JOSÉ JUAN QUESADA MOLINA

#### Contribuciones en congresos

- 2017 Poster en Congreso: Toda lattices and orthogonal polynomials in two variables, Congreso Bienal de la Real Sociedad Matemática Española (RSME2017), 30/01/2017, Zaragoza, España, Congreso TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2017 Poster en Congreso: Orthogonal polynomials on the unit ball with a mass on the sphere, CONGRESO BIENAL DE LA REAL SOCIEDAD MATEMÁTICA ESPAÑOLA, 30/01/2017, - Zaragoza, España, Congreso MARÍA CLOTILDE MARTINEZ ALVAREZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2017 Ponencia en Congreso: Topological Insulators and Characterization of their Phases, New Trends in Complex Quantum Systems Dynamics, 08/05/2017, CARTAGENA - ESPAÑA, Congreso MANUEL CALIXTO MOLINA

- 2017 Ponencia en Congreso: Topological Insulators and Characterization of their Phases, New Trends in Complex Quantum Systems Dynamics, 08/05/2017, CARTAGENA, Congreso MANUEL CALIXTO MOLINA

- 2017 Poster en Congreso: FlowMPI: An open source alternative to flow accumulation analysis, 7th International Conference on approximation methods and numerical modelling in environment and natural resources, 17/05/2017, OUJDA, MARRUECOS, Congreso

MARÍA JOSÉ IBÁÑEZ PÉREZ

- 2017 Poster en Congreso: Computing automatic transformation between homologous cartographic features, 7th International Conference on approximation methods and numerical modelling in environment and



natural resources, 17/05/2017, OUJDA, MARRUECOS, Congreso

MARÍA JOSÉ IBÁÑEZ PÉREZ

- 2017 Poster en Congreso: Equilibrium measures in the presence of a weak rational\_external field, "Congreso bienal de la Real Sociedad Matemática Española (RSME2017)", 30/01/2017, Zaragoza (España), Congreso JOAQUÍN SÁNCHEZ LARA

- 2017 Ponencia en Congreso: Equilibrium measures in presence of external fields created by fixed charges, "Optima Point Configuration and Orthogonal Polynomials", 19/04/2017, CASTRO URDIALES, CANTABRIA, Congreso

JOAQUÍN SÁNCHEZ LARA

- 2017 Sesión plenaria en Congreso: Bivariate orthogonal polynomials, 2D Toda lattices and Lax-type pairs, OPTIMAL POINT CONFIGURATIONS AND ORTHOGONAL POLYNOMIALS 2017, 19/04/2017, CASTRO URDIALES (CANTABRIA), Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2017 Sesión plenaria en Congreso: On orthogonal polynomials in several variables, VI Iberoamerican workshop on orthogonal polynomials and applications, 09/05/2017, Uberaba, Brasil, Congreso

LIDIA FERNÁNDEZ RODRÍGUEZ

- 2017 Ponencia en Congreso: Zeros of classical orthogonal polynomials in two variables, Optimal points configurations and orthogonal polynomials, 19/04/2017, CASTRO URDIALES, Congreso

LIDIA FERNÁNDEZ RODRÍGUEZ

- 2017 Conferencia Congreso no publicada: Sobolev orthogonal polynomials in several variables, VI IBEROAMERICAN WORKSHOP ON ORTHOGONAL POLYNOMIALS AND APPLICATIONS, 09/05/2017, Uberaba, Brasil, Congreso

ANTONIA MARÍA DELGADO AMARO

- 2017 Poster en Congreso: Polinomios núcleos y funciones de Christoffel para polinomios ortogonales de Sobolev en la bola unidad, Congreso Bienal de la Real Sociedad Española de Matemáticas, 30/01/2017, Zaragoza (España), Congreso

LIDIA FERNÁNDEZ RODRÍGUEZ

ANTONIA MARÍA DELGADO AMARO

- 2017 Comunicación en congreso: An application of semi-hidden Markov models to analyse stock market behaviour, 7th International Conference on approximation methods and numerical modelling in environment and natural resources, 17/05/2017, OUJDA, MARRUECOS, Congreso

JOSÉ MARTÍNEZ AROZA

- 2017 Conferencia Congreso no publicada: Hyperbolic vs parabolic macroscopic limits in Kinetic Theory of Active Particles, 2nd Mini-Workshop on "Mathematical Models for Cell Migration and Dispersal", 24/02/2017, Kaiserslautern, Alemania, Congreso

JUAN JOSÉ NIETO MUÑOZ

- 2017 Ponencia en Congreso: Mesoscopic models for neural networks, Workshop on "Cross diffusion systems and kinetic equations for biology", 10/05/2017, Austria / Vienna, Congreso

MARÍA JOSÉ CÁCERES GRANADOS

- 2017 Conferencias impartidas: Medidas de equilibrio para campos externos creados por varias cargas fijas, Coloquio del Departamento de Análisis Matemático (Universidad de La Laguna), 28/03/2017, La Laguna (Tenerife), Congreso

JOAQUÍN SÁNCHEZ LARA

- 2017 Comunicación en curso: Comportamiento colectivo de especies y límites hidrodinámicos singulares del modelo de Cucker-Smale, II Jornadas de Investigadores en Formación: Fomentando la Interdisciplinariedad, 17/05/2017, Facultad de Medicina. Universidad de Granada, Jornada JESÚS DAVID POYATO SÁNCHEZ

- 2017 Comunicación en congreso: Optimal knots allocation in bicubic spline interpolation, Inter. Conf. on Approx. Methods and Numerical Modelling in Environ. and Nat. Ressources, 17/05/2017, OUJDA (MARRUECOS), Congreso

MIGUEL PASADAS FERNANDEZ

PEDRO GONZÁLEZ RODELAS

- 2017 Poster en Congreso: Approximation error of 3D fuzzy data by smoothing bicubic splines, 7th International Conference on approximation methods and numerical modelling in environment and natural resources, 17/05/2017, OUJDA (MARRUECOS), Congreso

PEDRO GONZÁLEZ RODELAS

MIGUEL PASADAS FERNANDEZ

- 2017 Poster en Congreso: Filling holes with edge reconstruction, 7th International Conference on approximation methods and numerical modelling in environment and natural resources, 17/05/2017, Oujda (Marruecos), Congreso

ANTONIO PALOMARES BAUTISTA

MIGUEL ÁNGEL FORTES ESCALONA

PEDRO GONZÁLEZ RODELAS



MIGUEL LUIS RODRÍGUEZ GONZÁLEZ

- 2017 Poster en Congreso: Filling holes using a mesh of filled curves, 7th International Conference on approximation methods and numerical modelling in environment and natural resources, 17/05/2017, OUJDA (MARRUECOS), Congreso

PEDRO GONZÁLEZ RODELAS

MIGUEL PASADAS FERNANDEZ

ANTONIO PALOMARES BAUTISTA

MIGUEL ÁNGEL FORTES ESCALONA

- 2017 Comunicación en congreso: A new proposal for measuring electoral disproportionality: the quota index, MAMERN VII-2017, May 17-20, 2017 University Mohammed First, Oujda, Morocco, 17/05/2017, OUJDA (MARRUECOS), Congreso

VICTORIANO RAMÍREZ GONZÁLEZ

- 2016 Comunicación en congreso: Analysis of kinetic and macroscopic models of pursuit-evasion dynamics, NoLineal 2016: International conference on nonlinear mathematics and physics, 07/06/2016, IMUS, Universidad de Sevilla, Sevilla, España, Congreso

LUIS ANDRÉS URRUTIA MATARÍN

- 2016 Conferencia Congreso no publicada: Common behaviours in families of numerical semigroups: types of Frobenius varieties, International meeting on numerical semigroups with applications - Levico Terme 2016, 04/07/2016, LEVICO TERME. TRENTO (ITALIA), Congreso

AURELIANO MATÍAS ROBLES PÉREZ

- 2016 Poster en Jornada: Resolución de un problema de transporte mediante semigrupos numéricos, Aplicaciones Industriales del Álgebra Computacional, 21/06/2016, Logroño, Jornada

AURELIANO MATÍAS ROBLES PÉREZ

- 2016 Comunicación en congreso: Numerical semigroups: suitable sets of pseudo-Frobenius numbers, XV Encuentro de Álgebra Computacional y Aplicaciones, 22/06/2016, Logroño, Congreso

AURELIANO MATÍAS ROBLES PÉREZ

- 2016 Comunicación en congreso: Ball inner product with an outward normal derivative extra term, VII Jaen Conference on Approximation Theory, 03/07/2016, Ubeda (Jaen), Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

ANTONIA MARÍA DELGADO AMARO

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

LIDIA FERNÁNDEZ RODRÍGUEZ

- 2016 Poster en Congreso: Bivariate orthogonal polynomials, 2D Toda lattices and Lax-type representation, 4th Dolomites Workshop on Constructive Approximation and Applications, 08/09/2016, Alba di Canazei (Italia), Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Sesión plenaria en Jornada: Polinomios ortogonales bivariados, redes de Toda bidimensionales y pares de tipo Lax, XI Encuentro de Investigación en Teoría de Aproximación, 21/10/2016, Ainsa (Huesca), Jornada

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Comunicación en congreso: Krall orthogonal polynomials on the simplex, XII International Conference on Approximation and Optimization in the Caribbean, 05/06/2016, La Habana, Cuba, Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

LIDIA FERNÁNDEZ RODRÍGUEZ

ANTONIA MARÍA DELGADO AMARO

- 2016 Comunicación en congreso: An analogue of Krall orthogonal polynomials on the simplex, Second joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies, 06/06/2016, LOGROÑO - LA RIOJA, Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

LIDIA FERNÁNDEZ RODRÍGUEZ

ANTONIA MARÍA DELGADO AMARO

- 2016 Poster en Congreso: Equilibrium measures in presence of weak rational external fields, Tercer Encuentro de la Red de Polinomios Ortogonales y Teoría de Aproximación, 06/05/2016, ALBARRACÍN (TERUEL), Congreso

JOAQUÍN SÁNCHEZ LARA

- 2016 Poster en Congreso: Orthogonality for generalized Gegenbauer weight functions on the ball with an extra term on the sphere, Second joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies, 06/06/2016, LOGROÑO - LA RIOJA, Congreso

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

MARIA CLOTILDE MARTINEZ ALVAREZ

- 2016 Poster en Congreso: Orthogonal polynomials on the unit ball and fourth order partial differential equations, Tercer Encuentro de la Red de Polinomios Ortogonales y Teoría de Aproximación ORTHONET 2016, 06/05/2016, ALBARRACÍN, TERUEL, ESPAÑA, Congreso

MIGUEL ÁNGEL PIÑAR GONZÁLEZ



MARIA CLOTILDE MARTINEZ ALVAREZ

- 2016 Comunicación en congreso: Orthogonal Polynomials on the Unit Ball with a Mass on the Sphere, 15th International Conference Approximation Theory, 22/05/2016, San Antonio, Texas, USA, Congreso

MARIA CLOTILDE MARTINEZ ALVAREZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2016 Comunicación en congreso: On a Uvarov type modification of orthogonal polynomials on the unit ball, 4th Dolomites Workshop on Constructive Approximation and Applications, 08/09/2016, Alba di Canazei (Italia), Congreso

MARIA CLOTILDE MARTINEZ ALVAREZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2016 Conferencia Congreso no publicada: Estimates in Best Polynomial Approximation on the Unit Ball, Workshop SIGMA'2016 Signal, Image, Geometry, Modelling, Approximation, 31/10/2016, CIRM LUMINY, FRANCE, Congreso

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2016 Conferencias impartidas: Modeling through nonlinear flux limited spreading, Mathematical Modeling in Biology and Medicine 2016, 08/06/2016, Santiago de Cuba, Congreso

ÓSCAR SÁNCHEZ ROMERO

- 2016 Comunicación en congreso: Asymptotics of Sobolev Orthogonal polynomials on the unit ball, Second joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies, 06/06/2016, LOGROÑO - LA RIOJA, Congreso

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

ANTONIA MARÍA DELGADO AMARO

LIDIA FERNÁNDEZ RODRÍGUEZ

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

- 2016 Poster en Congreso: Sobolev orthogonal polynomials on the unit ball via outward normal derivatives, Tercer Encuentro de la Red de Polinomios Ortogonales y Teoría de Aproximación, 06/05/2016, ALBARRACIN (TERUEL), Congreso

MIGUEL ÁNGEL PIÑAR GONZÁLEZ

ANTONIA MARÍA DELGADO AMARO

LIDIA FERNÁNDEZ RODRÍGUEZ

TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ

- 2016 Poster en Congreso: Fractional diffusion equations modeling chemotaxis, NoLineal 2016: International conference on nonlinear mathematics and physics, 07/06/2016, IMUS, Universidad de Sevilla, Sevilla, España, Congreso

JUAN JOSÉ NIETO MUÑOZ

- 2016 Comunicación en congreso: Modeling chemotaxis from a fractional diffusion kinetic model, Biomat 2016: Cell dynamics and polymerization, 01/06/2016, Granada, Congreso

JUAN JOSÉ NIETO MUÑOZ

- 2016 Comunicación en curso: Long time behavior for some continuous polymerization models, Ecole d'été EDP et Probabilités pour les sciences du vivant, 02/07/2016, , Curso

JUAN CALVO YAGÜE

- 2016 Comunicación en congreso: Long time behavior for some continuous polymerization models, 10th European Conference on Mathematical and Theoretical Biology & SMB Meeting ECMTB2016, 11/07/2016, NOTTINGHAM, UNITED KINGDOM, Congreso

JUAN CALVO YAGÜE

- 2016 Poster en Congreso: poster en M&MKT: Summer School on "Methods and Models of Kinetic Theory", M&MKT: Summer School on "Methods and Models of Kinetic Theory", 06/06/2016, , Congreso

RICARDA SCHNEIDER

- 2016 Comunicación en congreso: 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 04/07/2016, Costa Ballena, Rota, Cádiz ( Spain), Congreso

DOMINGO GÁMEZ DOMINGO

- 2016 Comunicación en congreso: 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 04/07/2016, Costa Ballena, Rota, Cádiz ( Spain), Congreso

DOMINGO GÁMEZ DOMINGO

- 2016 Comunicación en curso: Some mathematical models in neuroscience, Summer School CIMPA 2016: Mathematical modeling in biology and medicine, 08/06/2016, Santiago de Cuba, Cuba, Curso

MARÍA JOSÉ CÁCERES GRANADOS

- 2016 Conferencias impartidas: How to write the entropy dissipation for many linear equations and some nonlinear ones, Interactions between partial differential equations & functional inequalities, 07/11/2016, , Congreso

JOSÉ ALFREDO CAÑIZO RINCÓN



- 2016 Conferencias impartidas: Asymptotic behaviour of the Becker-Doering equations, The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, 01/07/2016, ORLANDO - FLORIDA, Congreso  
JOSÉ ALFREDO CAÑIZO RINCÓN
- 2016 Conferencias impartidas: Recent advances on the theory of the Becker-Doering equations, 8th Summer School on Methods & Models in Kinetic Theory, 05/06/2016, Porto Ercole, Italia, Congreso  
JOSÉ ALFREDO CAÑIZO RINCÓN
- 2016 Conferencias impartidas: Some results on global existence of solutions to reaction-diffusion equations with detailed balance: close to equal diffusion coefficients, and close to equilibrium, Workshop on complex models of reaction- diffusion, 24/03/2016, - París, Francia, Congreso  
JOSÉ ALFREDO CAÑIZO RINCÓN
- 2016 Ponencia en Jornada: La Mujer en la Tecnología, Día de la Mujer en la Tecnología, 03/03/2016, Málaga, Jornada  
TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ
- 2016 Poster en Exposición: MIT: Mujeres en la Informática y la Telecomunicación, MIT: Mujeres en la Informática y la Telecommunicación, 03/03/2016, Málaga, Exposición  
TERESA ENCARNACIÓN PÉREZ FERNÁNDEZ
- 2016 Conferencias impartidas: Asymptotics of Sobolev orthogonal polynomials on the unit ball, Seminario del Grupo de investigación "Teoría de Aproximación y Polinomios Ortogonales", 14/06/2016, Almería, Congreso  
ANTONIA MARÍA DELGADO AMARO
- 2016 Conferencias impartidas: Best polynomial approximation on the unit ball, Seminario del Grupo de Investigación "GOYA", 06/10/2016, Granada, Congreso  
MIGUEL ÁNGEL PIÑAR GONZÁLEZ
- 2016 Conferencias impartidas: Medidas de equilibrio bajo un campo externo racional d\_ebil, Seminario del Grupo de Investigación Grupo en Ortogonalidad y Aplicaciones FQM384 (octubre 2016), 06/10/2016, Granada, Congreso  
JOAQUÍN SÁNCHEZ LARA
- 2016 Sesión plenaria en Congreso: Elegir Presidente de Gobierno, XIII Encuentro de la Red Española de Elección Social, 18/11/2016, Granada, Congreso  
VICTORIANO RAMÍREZ GONZÁLEZ
- 2016 Comunicación en congreso: Numerical solution of Love's integral equation by quasi-interpolation, 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 04/07/2016, Rota, Cádiz, España, Congreso  
DOMINGO BARRERA ROSILLO  
MARÍA JOSÉ IBÁÑEZ PÉREZ
- 2016 Comunicación en congreso: Parameter Extraction in Electron Devices by means of Polynomial Pattern Analysis, 16th International Conference on Computational and Mathematical Methods in Science and Engineering, 04/07/2016, Rota, Cádiz, España, Congreso  
DOMINGO BARRERA ROSILLO  
MARÍA JOSÉ IBÁÑEZ PÉREZ  
RAFAEL JOSÉ YÁÑEZ GARCÍA
- 2016 Conferencias impartidas: The art gallery problem, Escuela Internacional de Verano de Matemáticas, 15/07/2016, Sevilla, Congreso  
MIGUEL LUIS RODRÍGUEZ GONZÁLEZ
- 2016 Comunicación en congreso: Variational Evolutionary Splines for Solving a Model of Temporomandibular Disorders, 18th International Conference on Applied Mathematics and Engineering Mathematics, 06/12/2016, Florida, Miami, EEUU, Congreso  
MIGUEL LUIS RODRÍGUEZ GONZÁLEZ
- 2016 Sesión plenaria en Congreso: Euler-type equations and commutators in singular and hyperbolic limits of kinetic Cucker-Smale models., Spanish-French Workshop on Analysis of PDEs from Fluid Mechanics, 19/09/2016, Madrid, España, Congreso  
JUAN SOLER