

## Análisis Matemático

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**Nombre del Departamento:**

**Áreas de conocimiento:** Análisis Matemático

**Director:** D. Juan Carlos Cabello Piñar

**Secretario:** D. Antonio Moreno Galindo

**Página web:** [http://www.ugr.es/~dpto\\_am/](http://www.ugr.es/~dpto_am/)

**Profesorado:** CU: 10 / PTU: 16 / P. Emérito 1 / PDI Contratado y Otros: 4

### Grupos de Investigación.

FQM199 ANALISIS FUNCIONAL Y APLICACIONES

- Responsable: ANGEL RODRIGUEZ PALACIOS

FQM375 Análisis Funcional:  $C^*$ -álgebras y Teoría de Operadores

- Responsable: ANTONIO MIGUEL PERALTA PEREIRA

FQM116 ANALISIS NO LINEAL Y ECUACIONES DIFERENCIALES

- Responsable: DAVID ARCOYA ALVAREZ

FQM290 ESTRUCTURAS NORMADAS EN ESPACIOS VECTORIALES

- Responsable: JUAN CARLOS CABELLO PIÑAR

FQM185 GEOMETRIA DE LOS ESPACIOS DE BANACH

- Responsable: MARÍA DOLORES ACOSTA VIGIL

### Dirección y participación en Proyectos I+D

- 2018 Operators in Banach, Hilbert and functional spaces and Fourier quasicrystals, , 01/01/2018-31/12/2020

Responsable VOLODYMYR KADETS

- 2018 Ecuaciones en Derivadas Parciales no lineales. En evaluación, , 17/09/2018-

Investigador: SALVADOR VILLEGAS BARRANCO

- 2018 Ecuaciones en Derivadas Parciales locales y no locales. En evaluación, , 19/07/2018-

Investigador: ALEXIS MOLINO SALAS

- 2018 Elliptic Partial Differential Equations arising in Physics and Geometry. Solicitado y en trámite, , 04/10/2018-

Investigador: DAVID ARCOYA ALVAREZ

### Publicaciones en revistas

- 2019 Artículo: Quasilinear elliptic problems with singular and homogeneous lower order terms, *Nonlinear Analysis, Theory, Methods and Applications*, 179, , 105-130

SALVADOR LÓPEZ MARTÍNEZ

- 2019 Artículo: The Gelfand problem for the 1-homogeneous  $p$ -Laplacian, *Advances in Nonlinear Analysis*, 8, , 545-558

ALEXIS MOLINO SALAS

- 2019 Artículo: The Mazur-Ulam property for the space of complex null sequences, *Linear and Multilinear Algebra*, 67, 4, 799-816

ANTONIO MIGUEL PERALTA PEREIRA

- 2019 Artículo: A new proof of the Barton-Timoney theorem on the bidual of a  $JB^*$ -triple, *Mathematische Nachrichten*, 292, , 640-644

ANGEL RODRIGUEZ PALACIOS

MIGUEL CABRERA GARCÍA

- 2019 Artículo: Estimation of Housing Price Variations Using Spatio-Temporal Data, *Sustainability*, 11, 6, 1-21

MARIO CHICA RIVAS

- 2019 Artículo: Extending biholomorphic automorphisms of the open unit ball of a complex Banach space to the bidual, *Mathematical Proceedings Of The Royal Irish Academy*, 119A, 1, 57-63

ANGEL RODRIGUEZ PALACIOS

MIGUEL CABRERA GARCÍA

- 2018 Artículo: Linear maps on  $C^*$ -algebras which are derivations or triple derivations at a point, *Linear Algebra and Its Applications*, 538, , 1-21

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Artículo: PARTIAL ISOMETRIES: A SURVEY, *Advances in Operator Theory*, 3, 1, 75-116

ANTONIO MIGUEL PERALTA PEREIRA

FRANCISCO JOSE FERNANDEZ POLO

- 2018 Artículo: Some geometric properties of Read's space, *Journal of Functional Analysis*, 278, , 889-899

GINÉS LÓPEZ PÉREZ

MIGUEL MARTÍN SUÁREZ

VOLODYMYR KADETS

- 2018 Artículo: The Bishop-Phelps-Bollobás property for compact operators, *Canadian Journal of*

- Mathematics, 70, , 53-73  
MIGUEL MARTÍN SUÁREZ
- 2018 Artículo: The Mazur-Ulam property for commutative von Neumann algebras, Linear and Multilinear Algebra, , , -  
ANTONIO MIGUEL PERALTA PEREIRA  
MARÍA DE NAZARET CUETO AVELLANEDA
  - 2018 Artículo: 2-local standard isometries on vector-valued Lipschitz function spaces, Journal of Mathematical Analysis and Applications, 461, 2, 1287-1298  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: On the extension of isometries between the unit spheres of a  $C^*$ -algebra and  $B(H)$ , American Mathematical Society. Transactions, 5, , 63-80  
ANTONIO MIGUEL PERALTA PEREIRA  
FRANCISCO JOSE FERNANDEZ POLO
  - 2018 Artículo: A survey on Tingley's problem for operator algebras, Acta Scientiarum Mathematicarum, 84, 1-2, 81-123  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: Characterizing projections among positive operators in the unit sphere, Advances in Operator Theory, 3, 3, 731-744  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: Pointwise-generalized-inverses of linear maps between  $C^*$ -algebras and  $JB^*$ -triples, Operators and Matrices, 12, 2, 369-391  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: Preduals of  $JBW^*$ -triples are 1-Plichko spaces, The Quarterly Journal of Mathematics, 69, , 655-680  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: On the extension of isometries between the unit spheres of von Neumann algebras, Journal of Mathematical Analysis and Applications, 466, , 127-143  
ANTONIO MIGUEL PERALTA PEREIRA  
FRANCISCO JOSE FERNANDEZ POLO
  - 2018 Artículo: Preservers of  $\xi$ -Aluthge transforms, Linear Algebra and Its Applications, 554, , 86-119  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: The  $\xi$ -Function in the Space of Trace Class Operators, Mediterranean Journal of Mathematics, 217, , 1-15  
ANTONIO MIGUEL PERALTA PEREIRA
  - 2018 Artículo: Low rank compact operators and Tingley's problem, Advances in Mathematics, 338, , 1-40  
ANTONIO MIGUEL PERALTA PEREIRA  
FRANCISCO JOSE FERNANDEZ POLO
  - 2018 Artículo: Improved energy methods for nonlocal diffusion problems, Discrete and Continuous Dynamical Systems. Series A, 38, 3, 1404-1425  
ALEXIS MOLINO SALAS
  - 2018 Artículo: Elliptic equations involving the 1-Laplacian and a subcritical source term, Nonlinear Analysis, Theory, Methods and Applications, 168, , 50-66  
ALEXIS MOLINO SALAS
  - 2018 Artículo: A concave-convex problem with a variable operator, Calculus of Variations and Partial Differential Equations, , , -  
ALEXIS MOLINO SALAS
  - 2018 Artículo en prensa: Approximations to Fokker-Planck Equations, Funkcialaj Ekvacioj, , , -  
ALEXIS MOLINO SALAS
  - 2018 Artículo: Prescribing Gaussian and geodesic curvature on the disk, Advanced Nonlinear Studies, 18, , 453-468  
DAVID RUIZ AGUILAR
  - 2018 Artículo: The von Neumann inequality in complete normed non-associative complex algebras, Mathematical Proceedings Of The Royal Irish Academy, 118A, 2, 83-125  
ANGEL RODRIGUEZ PALACIOS  
MIGUEL CABRERA GARCÍA
  - 2018 Artículo: Antisymmetry of solutions for some weighted elliptic problems, Communications in Partial Differential Equations, 43, 3, 506-547  
SALVADOR VILLEGAS BARRANCO

#### Libros (con ISBN)

- 2018 Spear operators between Banach spaces: Springer International Publishing AG, , 2018, 978-3-319-71332-8  
VOLODYMYR KADETS

FRANCISCO JAVIER MERÍ DE LA MAZA  
MIGUEL MARTÍN SUÁREZ

- 2018 Non-associative normed algebras. Volume 2: Representation Theory and the Zel'manov Approach: Cambridge University Press, . CAMBRIDGE, REINO UNIDO, 2018, 978-1-107-04311-4

ANGEL RODRIGUEZ PALACIOS  
MIGUEL CABRERA GARCÍA

- 2018 A Course in Functional Analysis and Measure Theory: Springer, , 2018, 9783319920047  
VOLODYMYR KADETS

#### Contribuciones en congresos

- 2018 Conferencia Congreso no publicada: Spherical variants of the Gleason-Kahane-Zelazko and Kowalski-Slodkowski theorems, Workshop on infinite dimensional analysis- 2018 on the occasion of the 60th birthday of Domingo García Valencia, 1-3/02/2018, 01/02/2018, Facultad de Matemáticas, Universidad de Valencia, Congreso

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Conferencia Congreso no publicada: Can one determine the structure of a von Neumann algebra by the  $\lambda$ -Aluthge transform?, Workshop on the frontiers between Functional Analysis and Algebra, (WFFAA) A tribute to Prof. Amin Kaidi on the occasion of his retirement., 13/09/2018, Almería, Congreso

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Conferencias impartidas en Curso: L'Ecole Doctorale CIMPA de Casablanca de (Maroc), Algebres non associatives. Aspects analytique, geometrique et applications, 06-16 Mars 2018. Curso de tres horas titulado  $\lambda$ New classes of local and 2-local maps on  $C^*$ -algebras,  $JB^*$ -algebras, and  $JB^*$ -triple, L'Ecole Doctorale CIMPA de Casablanca de (Maroc), 06/03/2018, Casablanca, Marruecos, Curso

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Conferencias impartidas en Seminario: New spherical generalizations of the Gleason-Kahane-Zelazko and Kowalski-Slodkowski theorems, Bolyai Institute at Szeged University in Hungary. Analysis Seminar, 02/10/2018, Szeged, Hungary, Seminario

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Conferencias impartidas en Seminario: On the extension of isometries, Seminar at the Department of Analysis at Budapest University of Technology and Economics, 03/10/2018, Budapest, Hungary, Seminario

ANTONIO MIGUEL PERALTA PEREIRA

- 2018 Comunicación en congreso: The principal eigenvalue and optimal existence results for quasilinear singular problems, International Congress of Mathematicians, 01/08/2018, - Río de Janeiro, Brasil, Congreso

SALVADOR LÓPEZ MARTÍNEZ

- 2018 Comunicación en congreso: Existence, uniqueness and the principal eigenvalue for a class of quasilinear singular problems, The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications, 05/07/2018, Taipéi (Taiwán), Congreso

SALVADOR LÓPEZ MARTÍNEZ