

Geometría y Topología

Áreas de conocimiento: Geometría y Topología

Director: Francisco Urbano Pérez-Aranda

Secretario: Miguel Ortega Titos

Página web: <http://geometry.ugr.es/>

Profesorado: CU: 15, PTU: 6, PDI Contratado: 4

Tesis leídas

- Mean Curvature of a Spacelike Hypersurface in a Spacetime with Certain Causal Symmetries

Doctorando: José Antonio Sánchez Pelegrín

Director: Alfonso Romero Sarabia y Rafael María Rubio Ruiz

Fecha de lectura: 12 marzo 2018

Grupos de Investigación.

FQM324 GEOMETRIA DIFERENCIAL Y SUS APLICACIONES

- Responsable: CEFERINO RUIZ GARRIDO

FQM325 PROBLEMAS VARIACIONALES EN GEOMETRIA

- Responsable: FRANCISCO URBANO PÉREZ-ARANDA

Dirección y participación en Proyectos I+D

- 2017 ANALISIS GEOMETRICO DE SUPERFICES E EQUAÇÕES CONFORMES, , 01/01/2017-31/12/2019

Investigador/a JOAQUIN PÉREZ MUÑOZ

Contratos de investigación

- 2017 Contrato postdoctoral de investigación, ARTÍCULO 83, 01/01/2017-28/01/2017

Investigador/a JUAN JESÚS SALAMANCA JURADO

Publicaciones en revistas

- 2018 Artículo: Real hypersurfaces with Killing shape operator in the complex quadric, Mediterranean Journal of Mathematics, 15:6, , -

JUAN DE DIOS PÉREZ JIMÉNEZ

- 2018 Artículo: An analytical approach to the external force-free motion of pendulums on surfaces of constant curvature, Journal of Geometry and Physics, 129, , 200-207

JUAN JESÚS SALAMANCA JURADO

- 2017 Artículo en prensa: Every conformal minimal surface in R^3 is isotopic to the real part of a holomorphic null curve, Journal fuer die Reine und Angewandte Mathematik, , , -

ANTONIO ALARCÓN LÓPEZ

- 2017 Artículo: UNA NUEVA EDAD DE ORO DE LAS SUPERFICIES MINIMAS, La Gaceta De La Real Sociedad Matemática Española, 20, 5, 193-211

JOAQUIN PÉREZ MUÑOZ

- 2017 Artículo: A NEW GOLDEN AGE OF MINIMAL SURFACES, Notices of the American Mathematical Society, 64, 4, 347-358

JOAQUIN PÉREZ MUÑOZ

- 2017 Artículo: EMBEDDED MINIMAL SURFACES OF FINITE TOPOLOGY, Journal fuer die Reine und Angewandte Mathematik, , , -

JOAQUIN PÉREZ MUÑOZ

- 2017 Artículo en prensa: A construction of complete complex hypersurfaces in the ball with control on the topology, Journal fuer die Reine und Angewandte Mathematik, , , -

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2017 Artículo: Holomorphic Legendrian curves, Compositio Mathematica, 153, 9, 1945-1986

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2017 Artículo: Proper holomorphic Legendrian curves in $SL_2(C)$, Journal of Geometric Analysis, 27, 4, 3013-3029

ANTONIO ALARCÓN LÓPEZ

- 2017 Artículo en prensa: Complete minimal surfaces densely lying in arbitrary domains of R^n , Geometry & Topology, , , -

ANTONIO ALARCÓN LÓPEZ

ILDEFONSO CASTRO-INFANTES

- 2017 Artículo: Representing de Rham cohomology classes on an open Riemann surface by holomorphic forms, International Journal of Mathematics, 28, 9, 1740004-

ANTONIO ALARCÓN LÓPEZ

- 2017 Artículo: A Rigidity Result for Overdetermined Elliptic Problems in the Plane, Communications on Pure and Applied Mathematics, , , -
ANTONIO ROS MULERO
- 2017 Artículo: On the (non-)uniqueness of the Levi-Civita solution in the Einstein-Hilbert-Palatini formalism, Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 768, , 280-287
MIGUEL SANCHEZ CAJA
- 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, -
ALFONSO ROMERO SARABIA
- 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
ALFONSO ROMERO SARABIA
- 2017 Artículo: Completeness of inextensible electromagnetic trajectories in a stationary spacetime, Journal of Geometry and Physics, 117, , 144-150
ALFONSO ROMERO SARABIA
- 2017 Artículo: Uniform circular motion in General Relativity: Existence and extendibility of the trajectories, Classical and quantum gravity, , , -
ALFONSO ROMERO SARABIA
- 2017 Artículo: El movimiento rígido en relatividad: las paradojas de Bell y Ehrenfest, Revista española de física, 31, 1, 11-15
JUAN JESÚS SALAMANCA JURADO
- 2017 Artículo: Lie derivatives and structure Jacobi operator on real hypersurfaces in complex projective spaces, Differential Geometry And Its Applications, 50, , 1-10
JUAN DE DIOS PÉREZ JIMÉNEZ
- 2017 Artículo: Derivatives on real hypersurfaces of two-dimensional non-flat complex space forms, Mediterranean Journal of Mathematics, 14, 2, 13 pages-
JUAN DE DIOS PÉREZ JIMÉNEZ
- 2017 Artículo: On uniqueness of the foliation by comoving observers restspaces of a Generalized Robertson-Walker spacetime, General Relativity and Gravitation, 49, 16, 1-14
ALFONSO ROMERO SARABIA
JOSE ANTONIO SANCHEZ PELEGRIN
- 2017 Artículo en prensa: On the total mean curvature of a compact spacelike submanifold in Lorentz-Minkowski spacetime, Proceedings of the Royal Society of Edinburgh Section A: Mathematics, , , -
ALFONSO ROMERO SARABIA
- 2017 Artículo: Complete spacelike hypersurfaces in generalized Robertson-Walker and the null convergence condition: Calabi-Bernstein problems, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales - Serie A: Matemáticas, 111, 1, 115-128
JUAN JESÚS SALAMANCA JURADO
- 2017 Artículo en prensa: Improper affine spheres and the Hessian one equation, Differential Geometry And Its Applications, , , -
ANTONIO MARTINEZ LOPEZ
FRANCISCO MILÁN LÓPEZ
- 2017 Artículo: Stability and bifurcation of a capillary surface on a cylinder, SIAM Journal on Applied Mathematics, 77, , 108-127
RAFAEL LOPEZ CAMINO
- 2017 Artículo: Remarks on the boundary curve of a constant mean curvature topological disc, Complex Variables and Elliptic Equations, , , -
RAFAEL LOPEZ CAMINO
- 2017 Artículo: Complete spacelike hypersurfaces in generalized Robertson-Walker and the Null Convergence Condition. Calabi-Bernstein problems, Proceedings of the Royal Society of Edinburgh Section A: Mathematics, , , -
JUAN JESÚS SALAMANCA JURADO
- 2017 Artículo: Solutions to overdetermined elliptic problems in nontrivial exterior domains, Journal of the European Mathematical Society, 00, 00, 00-00
ANTONIO ROS MULERO
- 2017 Artículo: Complete embedded complex curves in the ball of C^2 can have any topology, Analysis & PDE, 10, 8, 1987-1999
ANTONIO ALARCÓN LÓPEZ
- 2017 Artículo en prensa: Complete densely embedded complex lines in C^2 , American Mathematical Society. Proceedings, , , -
ANTONIO ALARCÓN LÓPEZ

- 2017 Artículo en prensa: Minimal surfaces in minimally convex domains, American Mathematical Society. Transactions, , , -
ANTONIO ALARCÓN LÓPEZ
FRANCISCO JOSE LOPEZ FERNANDEZ
- 2017 Artículo en prensa: New complex analytic methods in the study of non-orientable minimal surfaces in R^n , Memoirs of the American Mathematical Society, , , -
ANTONIO ALARCÓN LÓPEZ
FRANCISCO JOSE LOPEZ FERNANDEZ
- 2017 Artículo en prensa: Darboux charts around holomorphic Legendrian curves and applications, International Mathematics Research Notices, , , -
ANTONIO ALARCÓN LÓPEZ
- 2017 Artículo: New plane curves with curvature depending on distance from the origin, Mediterranean Journal of Mathematics, 14, 3, 108:1-108:9
ILDEFONSO CASTRO-INFANTES
- 2017 Artículo: Strongly stable surfaces in sub-Riemannian 3-space forms, Nonlinear Analysis, Theory, Methods and Applications, 155, , 115-139
ANA MARÍA HURTADO CORTEGANA
MANUEL CÉSAR ROSALES LOMBARDO
- 2017 Artículo: Stability of maximal hypersurfaces in spacetimes: new general conditions and application to relevant spacetimes, General Relativity and Gravitation, 49, , 1-14
JUAN JESÚS SALAMANCA JURADO

Capítulos de libros (con ISBN)

- 2017 Título Capítulo: An introduction to certain topics on Lorentzian manifolds, Título Libro: Topics in Modern Differential Geometry: Atlantis Press, , 2017,
ALFONSO ROMERO SARABIA
- 2017 Título Capítulo: Notes on Translating Solitons in Semi-Riemannian Manifolds, Título Libro: Differential Geometry in Lorentz-Minkowski Space: Universidad de Granada, , 2017,
MIGUEL ORTEGA TITOS
- 2017 Título Capítulo: Derivatives on real hypersurfaces of non-flat complex space forms, Título Libro: Hermitian-Grassmannian submanifolds: Springer Nature Singapore, , 2017,
JUAN DE DIOS PÉREZ JIMÉNEZ

Contribuciones en congresos

- 2017 Poster en Congreso: Maximal hypersurfaces in pp-wave spacetimes, V Iberoamerican Meeting on Geometry, Mechanics and Control, 16/01/2017, Facultad de Matemáticas., Congreso
JOSE ANTONIO SANCHEZ PELEGRIN
- 2017 Poster en Congreso: Uniqueness results for complete maximal hypersurfaces in certain Robertson-Walker spacetimes, XI International Young Researcher Workshop on Geometry, Mechanics and Control., 12/01/2017, Facultad de Física., Congreso
JOSE ANTONIO SANCHEZ PELEGRIN
- 2017 Conferencia en Seminario no publicada: Translating solitons of the mean curvature flow, Analysis and PDE Seminar, 27/02/2017, STANFORD, CA; ESTADOS UNIDOS DE AMERICA., Seminario
FRANCISCO MARTIN SERRANO
- 2017 Comunicación en congreso: Spherical curves whose curvature depends on distance to a great circle., Congreso Bienal de la Real Sociedad Matemática Española, 30/01/2017, - Zaragoza, España, Congreso
ILDEFONSO CASTRO-INFANTES
- 2017 Sesión plenaria en Congreso: PROPERLY EMBEDDED MINIMAL ANNULI IN $H^2 \times R$, MINIMAL SURFACES, INTEGRABLE SYSTEMS AND VISUALIZATION. WORKSHOP SPRING 2017, 27/03/2017, CORK - IRLANDA, Congreso
LEONOR FERRER MARTÍNEZ
- 2017 Poster en Congreso: Un problema de Singer sobre curvas esféricas: curvatura y distancia, Conferencia Bienal de la Real Sociedad Matemática Española- 2017 (RSME17), 30/01/2017, FACULTAD DE EDUCACIÓN. UNIVERSIDAD DE ZARAGOZA, Congreso
ILDEFONSO CASTRO-INFANTES