

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 9 y Otros: 0

Tesis leídas

- Pseudo-parallel immersions in $S^n \times \mathbb{R}$ and $H^n \times \mathbb{R}$, and constant anisotropic mean curvature surfaces in \mathbb{R}^3

Doctorando: Marcos Paulo Tassi

Director: José Antonio Gálvez y Guillermo Lobos (Universidade Federal de São Carlos, Brasil)

Fecha de lectura: 20 de diciembre de 2019

- Problemas sobre la Curvatura Media en \mathbb{R}^{n+1} .

Doctorando: Eddygedson Souza Gama

Director: Francisco Martín y Luquéio Petrola de Melo Jorge (Universidade Federal do Ceará, Brasil)

Fecha de lectura: 17 de enero de 2020

- An Integral Representation of the Massive Dirac Propagator in the Nonextreme Kerr Geometry in Horizon-penetrating Coordinates

Doctorando: Christian Röken

Director: Miguel Sánchez Caja y Felix Finster, Universidad de Ratisbona (Alemania)

Fecha de lectura: 17 de abril de 2020

Grupos de Investigación.

FQM324 GEOMETRIA DIFERENCIAL Y SUS APLICACIONES

- Responsable: CEFERINO RUIZ GARRIDO

FQM325 Problemas variacionales en Geometría

- Responsable: FRANCISCO URBANO PÉREZ-ARANDA

Publicaciones en revistas

- 2020 Artículo: New complex analytic methods in the study of non-orientable minimal surfaces in \mathbb{R}^n , *Memoirs of the American Mathematical Society*, 264, 1283, -

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2020 Artículo: Complex curves in pseudoconvex Runge domains containing discrete subsets, *Journal d'Analyse Mathématique*, 140, 1, 207-226

ANTONIO ALARCÓN LÓPEZ

- 2019 Artículo: A characterization of the grim reaper cylinder, *Journal fuer die Reine und Angewandte Mathematik*, 2019, 746, 209-2034

FRANCISCO MARTIN SERRANO

- 2019 Artículo: A construction of complete complex hypersurfaces in the ball with control on the topology, *Journal fuer die Reine und Angewandte Mathematik*, 751, , 289-308

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2019 Artículo: Minimal surfaces in minimally convex domains, *American Mathematical Society. Transactions*, 371, 3, 1735-1770

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2019 Artículo: Darboux charts around holomorphic Legendrian curves and applications, *International Mathematics Research Notices*, 2019, 3, 893-922

ANTONIO ALARCÓN LÓPEZ

- 2019 Artículo: Characterization of f -extremal disks, *Journal of Differential Equations*, 266, 4, 2052-2077

JOSÉ MARÍA ESPINAR GARCÍA

- 2019 Artículo: Interpolation by conformal minimal surfaces and directed holomorphic curves, *Analysis & PDE*, 12, 2, 561-604

ANTONIO ALARCÓN LÓPEZ

ILDEFONSO CASTRO-INFANTES

- 2019 Artículo: Every meromorphic function is the Gauss map of a conformal minimal surface, *Journal of Geometric Analysis*, 29, 4, 3011-3038

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

- 2019 Artículo: Translating solitons in Riemannian products, *Journal of Differential Equations*, 266, 12, 7780-7812

FRANCISCO MARTIN SERRANO

- 2019 Artículo: Compact maximal hypersurfaces in globally hyperbolic spacetimes, *Classical and Quantum Gravity*, 36, , 15017-15030

JUAN JESÚS SALAMANCA JURADO

- 2019 Artículo: Interpolation and optimal hitting for complete minimal surfaces with finite total curvature, *Calculus of Variations and Partial Differential Equations*, 58, 1, -

ANTONIO ALARCÓN LÓPEZ

FRANCISCO JOSE LOPEZ FERNANDEZ

ILDEFONSO CASTRO-INFANTES

- 2019 Artículo: New complex analytic methods in the theory of minimal surfaces: a survey, *Journal of the Australian Mathematical Society*, 106, 3, 287-341

ANTONIO ALARCÓN LÓPEZ

- 2019 Artículo: Uniqueness theorems for fully nonlinear conformal equations on subdomains of the sphere, *Journal des Mathématiques Pures et Appliquées*, 122, , 49-66

JOSÉ MARÍA ESPINAR GARCÍA

- 2019 Artículo: THE ABRESCH-ROSENBERG SHAPE OPERATOR AND APPLICATIONS, *American Mathematical Society. Transactions*, 372, , 5483-5506

JOSÉ MARÍA ESPINAR GARCÍA

- 2019 Artículo: An extension of Calabi's correspondence between the solutions of two Bernstein problems to more general elliptic nonlinear equations, *Mathematical Notes*, 105, , 122-126

ALFONSO ROMERO SARABIA

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: Stable maximal hypersurfaces in Lorentzian spacetimes, *Nonlinear Analysis, Theory, Methods and Applications*, 179, , 354-382

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: From holography to the geometry of the spacetime, *International Journal of Geometric Methods in Modern Physics*, 16, 1, 1-11

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: Constant Mean Curvature Spacelike Hypersurfaces in Spatially Open GRW Spacetimes, *Journal of Geometric Analysis*, , , -

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: Spacelike hypersurfaces in standard static spacetimes, *General Relativity and Gravitation*, 51, , 1-66

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: Spacelike Hypersurfaces in Spatially Parabolic Standard Static Spacetimes and Calabi-Bernstein-Type Problems, *Mediterranean Journal of Mathematics*, 16, , 34-

ALFONSO ROMERO SARABIA

JOSE ANTONIO SANCHEZ PELEGRIN

- 2019 Artículo: Structure theorems for singular minimal laminations, *Journal fuer die Reine und Angewandte Mathematik*, , , -

ANTONIO ROS MULERO

JOAQUIN PÉREZ MUÑOZ

Contribuciones en congresos

- 2019 Ponencia en Congreso: Characterization of f-extremal disk, *Geometry and PDE in front of the Alhambra*, 22/01/2019, Granada, Congreso

JOSÉ MARÍA ESPINAR GARCÍA