

Contact Information

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Personal Data

Date of Birth: 15/07/1989

Place of Birth: Los Alcázares - Murcia (Spain)

Nationality: Spanish

Education

2007–2012	Degree in Mathematics	University of Alicante
2012–2013	Masters Degree in Mathematics	University of Granada
2013–Present	PhD Student in Mathematics	University of Granada

Grants

- 2007–2012. Ministry of science and education: Grant for undergraduate students.
- 2011. Ministry of science and education: Grant to collaborate at the Department of Mathematical Analysis of the University of Alicante.
- 2012. Ministry of science and education: Grant to study a masters degree.

- 2013–Present. Research project MTM2011-26717 (funded by Ministry of Economy). Four years grant (1 year grant plus a 3 years contract) to do a Ph D at the University of Granada.

Research projects where I participated

- Variational Methods and Elliptic Partial Differential Equations from Mathematical Physics. MTM2011-26717. Funded by the ministry of science and innovation, (01/08/2013–31/12/2014) Main researcher: David Ruiz Aguilar.
- Análisis No Lineal y Ecuaciones Diferenciales. FQM-116, funded by andalusian government (14/11/2013–Present). Main researcher: David Arcoya Álvarez.

Research Publications

1. Rafael López-Soriano, José Carlos Navarro-Climent and Julio Daniel Rossi, The infinity Laplacian with a transport term, *Journal of Mathematical Analysis and Applications* Volume 398, (2013), no.2, 752-765.
2. Rafael López-Soriano and David Ruiz, Ruiz, Prescribing the Gaussian curvature in a subdomain of \mathbb{S}^2 with Neumann boundary condition, *J. Geom. Anal.* DOI 10.1007/s12220-015-9566-x (2015).
3. Francesca de Marchis and Rafael López-Soriano, Existence and Non Existence Results for the singular Nirenberg problem, *preprint* [arXiv:1502.05579](https://arxiv.org/abs/1502.05579).

Conferences and Meetings

1. *Workshop on Nonlinear Elliptic PDE's and Applications*, which took place in University of Granada, Dec. 15-16 2011.
2. *IV Jornadas de Análisis Matemático*, which took place in University of Alicante, May 30-31 2013, giving a talk titled *El problema de la curvatura escalar prescrita para dominios en S^2* .
3. *Biomat 2013: Evolution and cooperation in social sciences and biomedicine*, which took place in University of Granada, Jun. 17-21 2013.
4. *II Congreso de Jóvenes Investigadores de la Real Sociedad Matemática Española*, which took place in University Sevilla, Sep. 16-20 2013, presenting a poster titled *El problema de la curvatura escalar prescrita para dominios en S^2* .
5. *Seminario de Ecuaciones Diferenciales* de la Universidad de Granada, which took place in University of Granada Sep. 27 2013, giving a talk titled *El problema de la curvatura Gaussiana prescrita para dominios en S^2* .
6. *Workshop on Nonlinear equations*, which took place in University Carlos III of Madrid, Oct. 17-18 2013.
7. *Seminario de Matemáticas*, which took place in University of Alicante, Feb. 20 2014, giving a talk titled *Investigación: Una salida real para jóvenes*.
8. *Seminario di Equazioni Differenziali*, which took place in University of Rome II 'Tor Vergata', Mar. 11 2014, giving a talk titled *Prescribing the Gaussian curvature in a subdomain of S^2* .
9. Course *Spring school on nonlinear PDEs*, which took place in University of Rome I 'La Sapienza', Mar. 24-27 2014.

10. *Partial Differential Equations and Geometric Measure Theory*, which took place in Cetraro (Cosenza), Jun. 2-7 2014.
11. *Congreso RSME 2015*, which took place in University of Granada, Feb. 02-06 2015.
12. *Seminario di Matematica*, which took place in University of Rome II 'Tor Vergata', May. 15 2015, giving a talk titled *Existence and non existence results for the singular Nirenberg problem*.
13. *3spalia 2015*, which took place in University of Rome 'La Sapienza', Jun. 17-19 2015.
14. *Seminario di Equazioni Differenziali*, which took place in University of Rome II 'Tor Vergata', Jun. 23 2015, giving a talk titled *Existence and non existence results for the singular Nirenberg problem*.
15. *An afternoon of Mathematics at Tor Vergata With Louis Nirenberg*, which took place in University of Rome II 'Tor Vergata', Jun. 26 2015.
16. *III Congreso de Jóvenes Investigadores de la Real Sociedad Matemática Española*, which took place in University of Murcia, Sep. 7-11 2015, giving a talk titled *Resultados de existencia y no existencia para el problema de Nirenberg singular*.

Visits

- University of Roma II 'Tor Vergata', March - July 2014. Adviser: Gabriella Tarantello.
- University of Roma II 'Tor Vergata', March - July 2015 Adviser: Gabriella Tarantello.

- Scuola Normale Superiore di Pisa, May 19-22 2015 Adviser: Andrea Malchiodi.

Prizes

- Frist prize in the poster competition of *Segundo Congreso de Jóvenes Investigadores de la Real Sociedad Matemática Española*, which took place in University Sevilla Sep. 16-20 2013, with the poster titled *El problema de la curvatura escalar prescrita para dominios en S^2* .

Other courses

- Course on the *Teoría de Calderón-Zygmund*, held in University of Granada, given by Lucio Boccardo (University of Rome 'La Sapienza'), April 10-15 2013.
- Course on the *Ecuaciones de evolución no-locales*, held in University of Granada, given by Julio D. Rossi (University of Buenos Aires), Jan. 20-24 2014.
- Course on the *Homogenization*, held in University of Granada, given by Francois Murat (Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie), Nov. 10-14 2014.
- Course on the *An introduction to $SU(3)$ Toda system*, held in University of Rome III, given by Prof. Juncheng Wei (University of British Columbia), May. 18-22 2015.

Languages

- Spanish. Mother tongue.

- English. Fluent spoken and written.
- Catalan. Fluent spoken and written.
- Italian. Intermediate level.