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Decreto Rettore Università di Roma “La Sapienza” n 563/2022 del 24.02.2022

Francescantonio Oliva  
Curriculum Vitae ai fini della pubblicazione

Rome  
05/04/2022

**Part I – General Information**

Full Name	Francescantonio Oliva
Spoken Languages	Italian, English

**Part II – Education**

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2013	Università di Roma “La Sapienza”	Master degree in Applied Mathematics
PhD	2017	Università di Roma “La Sapienza”	PHD degree in mathematical models in engineering, electromagnetism and nanoscience (evaluation: “con lode”)

**Part III – Appointments**

IIIA – Academic Appointments

Start	End	Institution	Position
07/2017	06/2018	Università di Roma “La Sapienza”	PostDoc Position
11/2018	10/2019	Istituto Nazionale Di Alta Matematica	PostDoc Position
04/2020	current	Università degli studi di Napoli “Federico II”	Rtd-A

**Part IV – Teaching experience**

Year	Institution	Lecture/Course
2022	Università degli studi di Napoli “Federico II”	Analisi Matematica I (72 hours) (Corso di laurea in ingegneria aerospaziale/meccanica) (in progress)
2021	Università degli studi di Napoli “Federico II”	Analisi Matematica I (72 hours) (Corso di laurea in informatica)
2020	Università degli studi di Napoli “Federico II”	Analisi Matematica I (72 hours) (Corso di laurea in informatica)
2019	Università di Roma “La Sapienza”	Istituzioni di matematica II (37,5 hours out of 75) (Corso di laurea in Architettura)

2018	Università di Roma “La Sapienza”	Istituzioni di matematica II (37,5 hours out of 75) (Corso di laurea in Architettura)
2017	Università di Roma “La Sapienza”	Istituzioni di matematica II (37,5 hours out of 75) (Corso di laurea in Architettura)

### Part V - Society memberships, Qualifications, Awards and Honors

- On 22/07/2021, I have been declared winner of a competition for an RTD-B Italian position (Art. 24, comma 3, lett. b) Law n. 240/2010) at the University of Napoli “Federico II”
- National Scientific Habilitation (ASN) for position as Associate Professor in Italian Universities (articolo 16 della legge 30 dicembre 2010, n. 240) SC 01/A3 (MAT/05) obtained in 07/05/2021 (ASN 2018-2020)

### Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2019	Esistenza e proprietà qualitative di soluzioni per problemi ellittici singolari	GNAMPA	
2015	Elliptic and parabolic PDEs with singularities and irregular sources	Progetto Avvio Ricerca (Sapienza)	

### Part VII – Research Activities

Keywords	Brief Description
Singular problems	The activity research focus primarily on existence and uniqueness of solutions to singular and degenerate boundary value problems in presence of non-regular data. Among other things, we focus on problems in presence of nonlinear principal operator which is modeled by the p-Laplacian. In this context we also deal with the asymptotic behaviour of weak solutions as p tends to one.
$\Delta$ -Laplace operator	
Renormalized and entropy solutions	
Existence and uniqueness of solutions	
Elliptic and parabolic boundary problems	
Eigenvalue estimates	

### Organization Activity

- **02-2022** Workshop Pdes in presence in Rome 2022, 16-18 February 2022 (funded of 1800 € by Indam)
- **05-2019** Minisymposium at the international conference on elliptic and parabolic problems, Gaeta 20-24 May 2019.

### Talks

- **07/2022** On the behaviour of solutions to some Robin problems driven by p-Laplacian as  $p$  tends to one, minisimposium "New trends on the 1-Laplacian" in CEDYA 2022, Zaragoza (Invited, to be held)
- **06/2022** On the behaviour of solutions to some Robin problems driven by p-Laplacian as  $p$  tends to one, minisimposium at CANUM, Evian les Bains (Invited, to be held)
- **04/2022** On some Robin problems driven by p-Laplacian as  $p$  to 1, Workshop "Proprietà qualitative per soluzioni di equazioni ellittiche non-lineari", Università degli studi della Calabria (Invited, to be held)
- **04/2021** On some boundary value problems involving the 1-Laplace operator, Seminario di dipartimento, Università degli studi di Napoli "Federico II"
- **07/2019** Existence results for equations with 1-laplacian and singular nonlinearities, Valencia
- **05/2019** Existence results for 1-Laplace Dirichlet problems with singular nonlinearities, International Conference on Elliptic and Parabolic Problems, Gaeta
- **03/2019** Existence and uniqueness for singular elliptic equations, University of Rouen.
- **11/2018** 1-Laplace Dirichlet problems with singular lower order terms, Workshop "New development in PDEs and related topics", Università di Napoli Federico II
- **05/2017** Existence and uniqueness of a solution to some 1-Laplace elliptic equations, International Conference on Elliptic and Parabolic Problems, Gaeta.
- **05-2016** Existence and uniqueness of a solution to some singular elliptic equation, 9<sup>th</sup> European Conference on Elliptic and Parabolic Problems, Gaeta.
- **03-2016** On the uniqueness of the solution on a singular elliptic problem, Departamento de Analisis Matematico, Universidad de Granada.
- **01-2015** Singular elliptic equations with measure data, Departamento de Analisis Matematico, Universidad de Granada.
- **04-2014** On a singular elliptic equations with measure data, Dipartimento SBAI, Sapienza

#### ABROAD EXPERIENCE

- **07/19** Visiting at the University of Valencia (Prof. Sergio Segura De Leon) (1 week)
- **03/19** Visiting at the University of Rouen (Prof. Patrizia Donato) (1 Month)
- **06/16** Visiting at the University of Lausanne (L.M. De Cave) (1 week)
- **02-04/16** Visiting at the University of Granada (Prof. David Arcoya/Tommaso Leonori).
- **10-02/15** Visiting at the University of Granada (Prof. David Arcoya/Tommaso Leonori).

#### Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	15	Scopus	2015	2022

Accepted papers	1			
Preprint	1			

### Referred to Scopus Database:

Total Impact factor	21,636 <sup>1</sup>
Total Citations	129
Average Citations per Product	8.6
Hirsch (H) index	6
Normalized H index*	0.75

\*H index divided by the academic seniority.

### Part IX– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. F. Oliva and F. Petitta, Finite and Infinite energy solutions of singular elliptic problems: Existence and Uniqueness, **Journal of Differential Equations** 264, (2018), 311-340. Journal IF: 1,938 in year of publication; currently 2,43. Citations on Scopus (30)
2. L. M. De Cave, R. Durastanti and F. Oliva, Existence and uniqueness results for possibly singular nonlinear elliptic equations with measure data, **NoDea-Nonlinear Differ. Equ. Appl.** (2018) 25: 18. Journal IF: 1,067 in year of publication; currently 1.286. Citations on Scopus (13)
3. V. De Cicco, D. Giachetti, F. Oliva and F. Petitta, The dirichlet problem for singular elliptic equations with general nonlinearities, **Calc. Var. and Pdes** 58 (4) Art 129 (2019). Journal IF: 1,526 in year of publication; currently 1.945. Citations on Scopus (5)
4. F. Oliva, Regularizing effect of absorption terms in singular problems, **Journal of mathematical analysis and applications**, 472, (1), (2019), 1136-1166. Journal IF: 1,22 in year of publication; currently 1,583. Citations on Scopus (12)
5. F. Oliva, B. Sciunzi and G. Vaira, Radial symmetry for a quasilinear elliptic equation with a critical Sobolev growth and Hardy potential, **Journal de Mathématiques Pures et Appliquées**, 140, (2020), 89-109. Journal IF: 2,464. Citations on Scopus (4)
6. F. Oliva and F. Petitta, A nonlinear parabolic problem with singular terms and nonregular data, **Nonlinear Analysis** 194, (2020), 111472. Journal IF: 2,064. Citations on Scopus (6)
7. F. Oliva, Existence and uniqueness of solutions to some singular equations with natural growth, **Annali di Matematica Pura ed Applicata**, 200 (1), (2021), 287-314. Journal IF: 0,969. Citations on Scopus (0)
8. M. Latorre, F. Oliva, F. Petitta and S. Segura de León, The Dirichlet problem for the 1-Laplacian with a general singular term and L1-data, **Nonlinearity**, 34 (3), (2021), 1792-1816. Journal IF: 2,129. Citations on Scopus (2)
9. M. Magliocca and F. Oliva, On some parabolic equations involving superlinear singular gradient terms, **Journal of Evolution Equations**, 21, (2021), 2547–2590 Journal IF: 1,67. Citations on Scopus (2)
10. R. Durastanti and F. Oliva, Comparison Principle For Elliptic Equations With Mixed Singular Nonlinearities, **Potential Analysis**, in press, doi: 10.1007/s11118-021-09906-3. Journal IF: 1,416. Citations on Scopus (0)
11. D. Giachetti, F. Oliva and F. Petitta, 1-Laplacian type problems with strongly singular nonlinearities and gradient terms, **Commun. Contemp. Math.**, in press, doi: 10.1142/S0219199721500814 Journal IF: 1,665. Citations on Scopus (0)
12. F. Della Pietra, C. Nitsch, F. Oliva and C. Trombetti, On the behaviour of the first eigenvalue of the p-Laplacian with Robin boundary conditions as p goes to 1, accepted for publication in **Advances in Calculus of Variations**. Journal IF: 2,537

<sup>1</sup> 24,173 if counting the article number 12 in the selected publications list (not yet in scopus database)

## Other Publications

1. L.M. De Cave and F. Oliva, Elliptic equations with general singular lower order term and measure data, **Nonlinear Analysis: Theory, Methods, Applications**, 128 (2015) 391-411. Journal IF: 1,125 in year of publication; currently 2,064. Citations on Scopus (13)
2. F. Oliva and F. Petitta, On singular elliptic equations with measure sources, **ESAIM: COCV**, 22, (1), (2016), 289-308. Journal IF: 1,54 in year of publication; currently 1,619. Citations on Scopus (36)
3. L. M. De Cave, F. Oliva and M. Strani, Existence of solutions to a non-variational singular elliptic system with unbounded weights, **Mathematische Nachrichten**, 290 (2-3), (2017), 1-12. Journal IF: 0,843 in year of publication; currently 1,228. Citations on Scopus (2)
4. L. M. De Cave and F. Oliva, On the regularizing effect of some absorption and singular lower order terms in classical Dirichlet problems with L1 data, **Journal of Elliptic and Parabolic Equations**, 2 (1), (2016), 73-85. Journal IF: - in year of publication; currently 0,664. Citations on Scopus (4)
5. R. Durastanti and F. Oliva, The Dirichlet problem for possibly singular elliptic equations with degenerate coercivity, **arXiv: 2105.13453**, under review.

Roma 05/04/2022

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