Simone Creo

Personal Data

Date and Place of Birth:	July 15, 1989, Anzio (RM), Italy
email:	simone.creo@sbai.uniroma1.it,
	simone.creo@uniroma1.it
Webpage:	www.sbai.uniroma1.it/~simone.creo
ResearchGate profile:	https://www.researchgate.net/profile/Simone_Creo

Education

01/11/2014 - 09/02/2018 — **PhD in Mathematical Models for Engineering**
Department of Basic and Applied Sciences for Engineering (SBAI),
Sapienza Università di Roma.
Thesis Title: *Local and nonlocal Venttsel' problems in fractal domains*.
Advisor: Prof. Maria Rosaria Lancia.

10/2011 - 01/2014 — **Master's Degree in Mathematics**
Department of Mathematics,
Sapienza Università di Roma.
Final mark: 105/110
Thesis Title: *Equazioni differenziali su domini prefrattali*.
Advisor: Prof. Paola Vernole.

09/2008 - 10/2011 — **Bachelor Degree in Mathematics**
Department of Mathematics,
Sapienza Università di Roma.
Final mark: 100/110
Thesis Title: *Il principio del massimo e alcune sue applicazioni*.
Advisor: Prof. Fabiana Leoni.

Position

01/02/2018 - 31/03/2018 — Winner of a public selection for a contract for the research activity:
"Problemi di magnetostatica in domini frattali e prefrattali: regolarità delle soluzioni deboli e loro approssimazione numerica tramite F.E.M."
Scientific manager: Prof. Maria Rosaria Lancia.

01/11/2014 - 31/10/2017 — Winner of a PhD scholarship in "Mathematical Models for Engineering, Electromagnetics and Nanosciences", Department of Basic and Applied Sciences for Engineering (SBAI), Sapienza Università di Roma.

Publications

S. Creo, M. Hinz, M. R. Lancia, A. Teplyaev, P. Vernole, *Magnetostatic problems in fractal domains*, under review. Preprint ArXiv: 1805.08262

M. Cefalo, S. Creo, M. R. Lancia, P. Vernole, *Nonlocal Venttsel' diffusion in fractal-type domains: regularity results and numerical approximation*, under review. Preprint ArXiv: 1707.00969

S. Creo, M. R. Lancia, A. I. Nazarov, P. Vernole, *On two-dimensional nonlocal Venttsel' problems in piecewise smooth domains*, accepted for publication on Discrete and Continuous Dynamical Systems Series S, 2019. Preprint ArXiv: 1702.06324

S. Creo, V. Regis Durante, *Convergence and density results for parabolic quasi-linear Venttsel' problems in fractal domains*, accepted for publication on Discrete and Continuous Dynamical Systems Series S, 2019.

S. Creo, M. R. Lancia, A. Vélez-Santiago, P. Vernole, *Approximation of a nonlinear fractal energy functional on varying Hilbert spaces*, Communications on Pure and Applied Analysis, 17 (2), (2018), 647–669.

Congresses, Courses and Workshops

Organizer of the Minisymposium MS29 ''New Trends in Mathematical Models for Applications'' at the ''*SIMAI 2018*'' congress, Sapienza Università di Roma,
Rome, Italy, July 2 - 6 2018.
Title of the talk: **Venttsel' problems for the p-Laplacian on 3D fractal domains**.

Workshop on ''*Sobolev Spaces and Partial Differential Equations*'', in honor of V. Maz'ya on the occasion of his 80th birthday, Accademia Nazionale dei Lincei,
Rome, Italy, May 17 - 18 2018.

Minicourse ''*Between discrete and continuous structures*'', by Prof. Umberto Mosco (WPI),
Riemann International School of Mathematics, Varese, Italy, June 19 - 23 2017.

Speaker at the ''*International Conference on Elliptic and Parabolic Problems*'', Gaeta (LT), Italy, May 22 - 26 2017,
Minisymposium MS15 ''Differential Problems in Applications''.
Title of the talk: **BVPs with nonlocal dynamical boundary conditions**.

Congress ''*Roma Caput PDE*'', Sapienza Università di Roma,
Rome, Italy, January 23 - 26 2017.

Congress ''*A Mathematical Tribute to Ennio De Giorgi*'',
Pisa, Italy, September 20 - 21 2016.

Speaker at the ''*11th AIMS Conference on Dynamical Systems, Differential Equations and Applications*'', Orlando, FL, USA, July 1 - 5 2016,
Special Session SS122 ''Variational convergence and Degeneracies in PDES: fractal domains, composite media, dynamical boundary conditions''.
Title of the talk: **Numerical approximation of nonlocal Venttsel' problems in (pre)fractal domains**.

Minicourse ''*About the use of Differential 1-forms on the Sierpinski Gasket and other fractals*'',
by Prof. Alexander Teplyaev (UConn),
SBAI department, Rome, Italy, April-May 2015.

Teaching activities

Teacher of Analisi Matematica, Management Engineering (Ingegneria Gestionale), Sapienza Università di Roma, with Prof. P. Vernole (3 CFU), A.Y. 2017/2018.

Tutor of Analisi I, Aerospace Engineering (Ingegneria Aerospaziale), Sapienza Università di Roma, for Prof. M. R. Lancia, A.Y. 2016/2017 and A.Y. 2017/2018.

MEMBERSHIPS

2015 -	Affiliated to GNAMPA (National Group of Mathematical Analysis, Probability and its Applications)
2017	Member of the Sapienza Research Project ''Boundary Value Problems with Integrodifferential Terms on Fractafolds'', Scientific Manager: Prof. M. R. Lancia
2016	Member of the Sapienza Research Project ''Problemi non lineari sui frattali'', Scientific Manager: Prof. M. A. Vivaldi

LANGUAGES

ENGLISH:	Good knowledge
ITALIAN:	Mother tongue
FRENCH:	Basic knowledge
SPANISH:	Basic knowledge

COMPUTER SKILLS

PROGRAMMING LANGUAGES:	C/C++, Matlab, Mathematica, SQL.
OTHER KNOWLEDGE:	LaTeX, Comsol, Office applications.
	Possessor of the MOS (Microsoft Office Specialist) Certification.