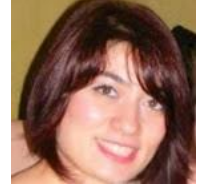


CURRICULUM VITAE



Fatma Gamze DÜZGÜN

October 24, 1983

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Educational Background

- PostDoc, University of Florence, Italy, Feb 2014-Feb 2015
- PhD in Mathematics, Hacettepe University, Turkey, 2014
- M.Sc in Mathematics, Hacettepe University, Turkey, 2008
- B.Sc in Mathematics, Hacettepe University, Turkey, 2005

Theses

- Ph.D Thesis: “*Investigation of Class of Nonlinear Diffusion Equations*” (2014, Supervisor Prof. Dr. Kamal Soltanov, Faculty of Science, Department of Mathematics, Hacettepe University).
- M.Sc Thesis: “*Investigation of the 3. Type Boundary Value Problem of an Emden-Fowler Type Equation*” (2008, Supervisor Prof. Dr. Kamal Soltanov, Faculty of Science, Department of Mathematics, Hacettepe University).

Research Interest

- Nonlinear Differential Equations (Parabolic type, Elliptic type), Nonlinear Diffusion Problems, Fractional Laplacian Operators, Anisotropic equations, Existence, Uniqueness and Behavior of Solutions, Holder Regularity of Solutions, Harnack Estimates

Foreign Languages

- English (advanced)
- Italian (advanced)
- French (intermediate)
- Spanish (intermediate)

Work Experience

- Assoc. Prof. of Analysis and Theory of Functions, Department of Mathematics, Hacettepe University, Beytepe-Ankara, Turkey, November 2018-present.
- Co-head of Department of Mathematics, Hacettepe University 2018-2021
- Erasmus Coordinator of department, Hacettepe University 2018-present
- Academic Visitor in Dept. of Math. “Ulisse Dini” of University of Florence (working with Prof. Dr. Vincenzo Vespri), 14.01.2018-17.06.2018
- Researcher (postdoc under scholarship), University of Florence, Italy, 01.03.2014-28.02.2015
- Academic Visitor in Dept. of Math. “Ulisse Dini” of University of Florence (working with Prof. Dr. Vincenzo Vespri), 01.11.2012-01.05.2013.
- Research Assistant, Department of Mathematics, Hacettepe University, Beytepe-Ankara, Turkey, 2005-2018

Papers

- Duzgun F. G., Mosconi S., Vespri V., “*Harnack and Pointwise Estimates for Degenerate or Singular Parabolic Equations*”, Chapter In book: Contemporary Research in Elliptic PDEs and Related Topics, 301-368 (July 2019).
- Duzgun F. G., Mosconi S., Vespri V., “*Anisotropic Sobolev embeddings and the speed of propagation for parabolic equations*”, Journal of Evolution Equations., (September 2019).
- Duzgun F. G., Iannizzotto A., “*Three nontrivial solutions for nonlinear fractional Laplacian equations*”, Advances in Nonlinear Analysis, (May 2018).
- Chiti F., Fantacci R., Duzgun F. G., Vespri V., “*A game theory inspired channel allocation policy for multi-radio Ad Hoc Communications*” Wireless Communications and Mobile Computing, Vol:16, Issue:13, Pages: 1826-1836 (2016)
- Duzgun F. G., Gianazza U., Vespri V., “*1-Dimensional Harnack Estimates*”, Discrete and Continuous Dynamical Systems - Series S 9(3) Pages: 675-685 (2016)
- Duzgun F. G., Soltanov K., “*Existence, Uniqueness and Behaviour of Solution for Nonlinear Diffusion type Equation with Third Type Boundary Value*”, EMS Rendiconti Lincei Matematica e Applicazioni, Vol 26, Issue 4, 445-463 (2015)
- Duzgun F. G., Fornaro S., Vespri V., “*Interior Harnack Estimates: The State-of-the-Art for Quasilinear Singular Parabolic Equations*” Milan Journal of Mathematics, Volume: 83 Issue: 2 Pages: 371-395 (2015).
- Fino A., Duzgun F. G., Vespri V., “*Conservation of the Mass for Solutions to a Class of Singular Parabolic Equations*”, Kodai Mathematical Journal, Volume 37, Number 3, 519-531 (2014).
- Duzgun F. G., Soltanov K., “*Some Mixed Problems for Semilinear Parabolic Type Equation*”, Journal of Applied Analysis and Computation, Vol. 4, no 3, Pages 271-281 (2014).
- Duzgun F. G., Marcellini P., Vespri V., “*Space Expansion for a Solution of an Anisotropic p -Laplacian Equation by Using a Parabolic Approach*”, Riv. Mat. Univ. Parma, Vol 5 (2014).
- Duzgun F. G., Marcellini P., Vespri V., “*An Alternative Approach to the Holder Continuity of Solutions to some Elliptic Equations*”, Nonlinear Analysis: Theory, Methods & Applications, Vol 94, Pages 133-141 (2014).
- Duzgun F. G., Soltanov K., “*On Some Emden-Fowler Type Equations*”, AIP Conf. Proc.,1168, 377 (2009)

Projects

- Research Project in Mathematics Dept. of University of Florence, “*Regularity Results for a Larger Class of Anisotropic Operators*”, 2018.
- Post Doc. Project in Information Eng. of University of Florence, “*Sistemi wireless di nuova generazione per comunicazioni mobili professionali per la piattaforma WILIFE*”, 2014-2015.
- The Scientific and Technological Research Council of Turkey (TUBİTAK)- The National Academy of Sciences of Ukraine (NASU) project “*Solvability of nonlinear dynamical systems of mathematical physics, Exact integrability, and Analytic properties of solution manifolds*”, scholarship, 2011-2014.

Conferences and Academic Activities

- Erasmus Teaching Mobility, Dept. of Mathematics and Mathematical Statistics, Umeå University, Sweden, May 2023
- Workshop in Mathematical Modelling and Analysis, Umeå University, Sweden, 2023 (invited speaker)
- Seminar in the Dept. of Mathematics and Mathematical Statistics, Umeå University, Sweden, 2023
- IV Workshop on Trends in Nonlinear Analysis, Cagliari, Italy, 2022 (invited speaker)
- The 26th International Conference on Difference Equations and Applications (ICDEA 2021), online conference, 26-31 July 2021 (speaker)
- Seminario di Calcolo delle Variazioni ed Equazioni alle Derivate Parziali, Dept. of Mathematics, University of Florence, Italy, Sept 2019.
- Turkey-Italy Colloquium on Applied Analysis and Differential Equations (TICAD 2019), Hacettepe University, Ankara, Turkey, 10-11 July 2019 (organizer)
- European Women in Mathematics General Meeting 2018, Celebrating 30 years of EWM, Graz, Austria, September 2018 (speaker: PDEs around the world-representation of Asia).
- General Analysis Seminars, Dept. of Mathematics, University of Padova, Italy, April 2018.
- Academic visitor in Math. Dept. "Ulisse Dini" of Florence University (collaboration with Prof. Dr. Vincenzo Vespri), 14.01.2018-17.06.2018.
- III Workshop on Trends in Nonlinear Analysis, Cagliari, Italy, 2017
- The 11th ISAAC Congress, Vaxjo, Sweden, 2017 (speaker).
- Harnack's Inequalities and Nonlinear Operators, Cortona, Italy, 2017 (speaker).
- Research Meeting on Non-Local Operators, Cagliari, Italy, 2016 (invited speaker).
- The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, USA, 2016 (speaker)
- XL Summer School on Mathematical Physics, Ravello, Italy, 2015 (speaker)
- Workshop in Nonlinear PDEs, Brussels, Belgium, 2015 (speaker)
- Post Doc. in Department of Information Engineering, Florence University, Italy (01.03.2014-28.02.2015)
- CICAM 7- Seventh China-Italy Colloquium on Applied Mathematics, Palermo, Italy, 8-11 September 2014 (speaker).
- CIME-Centro Internazionale Matematico Estiva/ Vector Valued Partial Differential Equations and Applications, Cetraro, Italy, July 2013.
- Academic Visitor in Dept. of Math. "Ulisse Dini" of University of Florence (working with Prof. Dr. Vincenzo Vespri), 01.11.2012-01.05.2013.
- The International Society for Analysis, its Applications and Computation (ISAAC), Moscow, Russia, 2011 (speaker).
- 6th Ankara Mathematics Days, Hacettepe University, Ankara, Turkey, 2011.
- Mathematical Analysis, Differential Equations and Their Applications, Bulgaria, 2010 (speaker).
- 7th International Conference of Numerical Analysis and Applied Mathematics, Crete, Greece, 2009 (speaker).
- XXI. National Mathematics Symposium, Koç University, Istanbul, Turkey, 2008.
- XX. National Mathematics Symposium, Erzurum, Turkey, 2007 (speaker).
- XIX. National Mathematics Symposium, Kütahta, Turkey, 2006.