

## Assoc. Prof. FATMA GAMZE DÜZGÜN

### Personal Information

**Office Phone:** [+90 312 297 7850](tel:+903122977850) Extension: 117

**Email:** [gamzeduz@hacettepe.edu.tr](mailto:gamzeduz@hacettepe.edu.tr)

**Web:** <https://avesis.hacettepe.edu.tr/gamzeduz>

### International Researcher IDs

ORCID: 0000-0001-8333-5698

ScopusID: 55851479800

Yoksis Researcher ID: 168984

### Education Information

Post Doctorate, Universita Degli Studi di Firenze, Mühendislik Fak., Informasyon, Italy 2014 - 2015

Doctorate, Hacettepe University, Fen Fak., Matematik, Turkey 2008 - 2014

Postgraduate, Hacettepe University, Fen Fak., Matematik, Turkey 2005 - 2008

Undergraduate, Hacettepe University, Fen Fak., Matematik, Turkey 2001 - 2005

### Foreign Languages

English, C1 Advanced

Italian, C1 Advanced

French, B1 Intermediate

### Dissertations

Doctorate, Investigation of a class of nonlinear diffusion equations, Hacettepe Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2014

Postgraduate, Emden-Fowler tipli denklem için 3. sınıf sınır probleminin incelenmesi, Hacettepe Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2008

### Research Areas

Mathematics, Differential Equations, Natural Sciences

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2005 - Continues

### Courses

Matematik 1, Undergraduate, 2017 - 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Boundedness Through Nonlocal Dampening Effects in a Fully Parabolic Chemotaxis Model with Sub and Superquadratic Growth**  
Chiyo Y., DÜZGÜN F. G., Frassu S., Viglialoro G.  
Applied Mathematics and Optimization, vol.89, no.1, 2024 (SCI-Expanded)
- II. **Anisotropic Sobolev embeddings and the speed of propagation for parabolic equations**  
DÜZGÜN F. G., Mosconi S., Vespri V.  
JOURNAL OF EVOLUTION EQUATIONS, vol.19, no.3, pp.845-882, 2019 (SCI-Expanded)
- III. **Three nontrivial solutions for nonlinear fractional Laplacian equations**  
DÜZGÜN F. G., IANNIZZOTTO A.  
ADVANCES IN NONLINEAR ANALYSIS, vol.7, no.2, pp.211-226, 2018 (SCI-Expanded)
- IV. **A game theory-inspired channel allocation policy for multi-radio pervasive ad hoc communications**  
CHITI F. G., FANTACCI R., Duezguen F. G., Vespri V.  
WIRELESS COMMUNICATIONS & MOBILE COMPUTING, vol.16, no.13, pp.1826-1836, 2016 (SCI-Expanded)
- V. **1-DIMENSIONAL HARNACK ESTIMATES**  
DÜZGÜN F. G., GIANAZZA U., Vespri V.  
DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS-SERIES S, vol.9, no.3, pp.675-685, 2016 (SCI-Expanded)
- VI. **Interior Harnack Estimates: The State-of-the-Art for Quasilinear Singular Parabolic Equations**  
Duezguen F. G., FORNARO S., Vespri V.  
MILAN JOURNAL OF MATHEMATICS, vol.83, no.2, pp.371-395, 2015 (SCI-Expanded)
- VII. **Existence, uniqueness and behaviour of solutions for a nonlinear diffusion equation with third type boundary value condition**  
DÜZGÜN F. G., Soltanov K.  
RENDICONTI LINCEI-MATEMATICA E APPLICAZIONI, vol.26, no.4, pp.445-463, 2015 (SCI-Expanded)
- VIII. **CONSERVATION OF THE MASS FOR SOLUTIONS TO A CLASS OF SINGULAR PARABOLIC EQUATIONS**  
FINO A. Z., DÜZGÜN F. G., Vespri V.  
KODAI MATHEMATICAL JOURNAL, vol.37, no.3, pp.519-531, 2014 (SCI-Expanded)
- IX. **SOME MIXED PROBLEMS FOR SEMILINEAR PARABOLIC TYPE EQUATION**  
DÜZGÜN F. G., SOLTANOV K. N.  
JOURNAL OF APPLIED ANALYSIS AND COMPUTATION, vol.4, no.3, pp.271-281, 2014 (SCI-Expanded)
- X. **An alternative approach to the Holder continuity of solutions to some elliptic equations**  
DÜZGÜN F. G., Marcellini P., Vespri V.  
NONLINEAR ANALYSIS-THEORY METHODS & APPLICATIONS, vol.94, pp.133-141, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Space Expansion for a Solution of an Anisotropic p-Laplacian Equation by Using a Parabolic Approach**  
DÜZGÜN F. G., Vespri V., Marcellini P.  
Riv. Mat. Univ. Parma, vol.5, pp.93-111, 2014 (Scopus)

## Books & Book Chapters

- I. **Harnack and pointwise estimates for degenerate or singular parabolic equations.**  
DÜZGÜN F. G., Mosconi S., Vespri V.  
in: Contemporary Research in Elliptic PDEs and Related Topics, Serena Dipierro, Editor, Springer, pp.301-368, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Space Expansion for a Solution of an Anisotropic p-Laplacian Equation by Using a Parabolic Approach**  
DÜZGÜN F. G.  
European Women in Mathematics General Meeting 2018, 3 - 07 September 2018
- II. **Three Nontrivial Solutions for a Nonlinear Fractional Laplacian Problem**  
DÜZGÜN F. G.  
the 11th ISAAC congress, Vaxjö, Sweden, 14 - 18 August 2017
- III. **An alternative approach to Hölder continuity of solutions to some elliptic equations**  
DÜZGÜN F. G.  
Harnak's Inequalities and Nonlinear Operators, Cortona, Italy, 18 - 23 June 2017
- IV. **Existence of Three Nontrivial Solutions for a Nonlinear Fractional Laplacian Problem**  
DÜZGÜN F. G.  
The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, United States Of America, 1 - 05 July 2016
- V. **Solvability and behavioral results for nonlinear diffusion type equation with third type boundary value**  
DÜZGÜN F. G.  
XL Scuola Estiva di Fisica Matematica, Ravello, Italy, 14 - 26 September 2015
- VI. **On existence and Behaviour of Solution for Nonlinear Diffusion Type Equation with Third Type Boundary Value**  
DÜZGÜN F. G.  
Workshop in Nonlinear PDEs, Brussels, Bruksel, Belgium, 7 - 11 September 2015
- VII. **On some Emden-Fowler type Equations**  
DÜZGÜN F. G., SOLTANOV K. N.  
International Conference on Numerical Analysis and Applied Mathematics, Rethymno, Greece, 18 - 22 September 2009, vol.1168, pp.256-259

## Supported Projects

- DÜZGÜN F. G., VESPRİ V., Project Supported by Higher Education Institutions, Anisotropik Operatörlerin Daha Geniş Bir Sınıfı için Düzenlilik/Süreklilik Sonuçları (Regularity Results for a Larger Class of Anisotropic Operators), 2017 - 2018
- DÜZGÜN F. G., Project Supported by Higher Education Institutions, Doğrusal olmayan kesirli Laplace problemi için sıfırdan farklı üç çözümün varlığı, 2016 - 2016
- DÜZGÜN F. G., Project Supported by Higher Education Institutions, Bazı eliptik denklemlerin çözümlerinin Hölder süreklilik özelliğine bir alternatif yaklaşım, 2015 - 2016
- DÜZGÜN F. G., Project Supported by Higher Education Institutions, Üçüncü sınıf sınır değerli doğrusal olmayan difüzyon tipli denklemin çözümünün varlığı ve davranışı üzerine, 2015 - 2016

## Metrics

- Publication: 19  
Citation (WoS): 26  
Citation (Scopus): 18  
H-Index (WoS): 2  
H-Index (Scopus): 3

## Non Academic Experience

Floransa Üniversitesi  
Floransa Üniversitesi  
Floransa Üniversitesi