

## PINAR METE

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### CITIZENSHIP

Turkish

### MARITAL STATUS

Married

Department of Mathematics  
Balıkesir University, Çağış Campus  
Balıkesir 10145, Turkey  
Phone : + 90-266-6124408  
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### EDUCATION

#### **Ph.D. in Comp. Alg. Geometry and Comm. Algebra, 1999-2005**

Middle East Technical University, Ankara 06531, Turkey

Thesis title : *“Hilbert Functions of Gorenstein Monomial Curves”*

Supervisor : Asst.Prof. Sefa Feza Arslan

#### **M.Sc. in Ring Theory, 1995-1997**

Balıkesir University, Balıkesir 10100 , Turkey

Thesis title : *“Automorphisms of Polynomial Rings”*

Thesis studied at the Department of Mathematics,

Middle East Technical University, Ankara 06531, Turkey.

Supervisor : Prof. Dr. Arif Kaya.

#### **B.Sc. in Mathematics Education (German), 1988-1993**

Hacettepe University, Ankara, Turkey

### EMPLOYMENT

#### **Assistant Prof. Dr. at Balıkesir University**

March 2007 - present

#### **Research Assistant Dr. at Balıkesir University**

November 2005 - March 2007

#### **Research Assistant at Middle East Technical University**

June 1999 - November 2005

#### **Research Assistant at Balıkesir University**

June 1994 - June 1999

### RESEARCH

#### **Current Interests**

Combinatorial Commutative Algebra,

Computational Algebraic Geometry

### PUBLICATIONS

*“Hilbert Functions of Gorenstein Monomial Curves”*,

### PREPRINTS

(with Feza Arslan), Proc. Amer. Math. Soc.,135(2007), 1993-2002.

*“Gluing and Hilbert Functions of Monomial Curves”*,

(with F. Arslan and M. Şahin), Proc. Amer. Math. Soc.,137(2009), 2225-2232.

*“Toric Ideals of Simple Surface Singularities”*,

(with G. Kaya and M.Şahin), Hacettepe Journal of Math and Statistics, 44(5) (2015), 1057-1069.

*“Minimal Free Resolutions of the Associated Graded Ring of Certain Monomial Curves”*

(with E. E. Zengin), Submitted.

*“Minimal Free Resolutions of the Tangent Cones of Gorenstein Monomial Curves”*,

(with E. E. Zengin), Submitted.

**CONFERENCES  
ATTENDED**

**Women and Mathematics: Algebra**

March 11, 2017, İstanbul, Turkey  
*"Algorithms in Commutative Algebra "*  
P. Mete (oral presentation)

**Midwest Commutative Algebra Conference at Purdue University**

August 3-7, 2015, West Lafayette, Indiana, USA  
*"On minimal free resolutions of the associated graded rings of Gorenstein monomial curves "*  
P. Mete (poster presentation)

**Syzygies in Berlin**

May 27-31, 2013, Berlin, Germany  
*"On minimal free resolutions of the tangent cone of monomial curves "*  
P. Mete (poster presentation)

**Turkish Women in Mathematics, Geometry-Topology Seminars**

August 29-September 2, 2012, Ankara, Turkey  
*"Computing Minimal Free Resolutions "*  
P. Mete (oral presentation)

**İzmir Algebraic Geometric Topology Days II**

09-14 January 2011, İzmir, Turkey  
*"Minimal Free Resolutions of some Gorenstein Monomial Curves "*  
P. Mete (oral presentation)

**Commutative Algebra and its App. to Combinatorics and Alg. Geometry**

September 12-25, 2010, İstanbul, Turkey  
*"On Numerical Invariants of Local Rings "*  
P. Mete (oral presentation)

**Toric and Tropical Geometry Day**, April 30, 2010, İstanbul, Turkey

*"On Hilbert Functions of Monomial Curves "*  
P. Mete (oral presentation)

**Antalya Algebra Days XI**, May 20-24, 2009, Antalya, Turkey

*"Gluing and non-decreasing Hilbert Functions"*  
P. Mete (oral presentation)

**4th International Geometry Symposium**, July 17-21, 2006,

Zonguldak Karaelmas University, Zonguldak, Turkey  
*"Conjectures on Hilbert function of a CM local ring"*  
P. Mete (oral presentation)

**Antalya Algebra Days VIII**, May 17-21, 2006, Antalya, Turkey

*"Hilbert Functions of Gorenstein Monomial Curves"*  
P. Mete (oral presentation)

**2nd Geometry Symposium**, June 30 - July 03, 2004,

Sakarya University, Sakarya, Turkey

**Antalya Algebra Days VI**, May 19-23, 2004, Antalya, Turkey

**Antalya Algebra Days IV**, May 22-26, 2002, Antalya, Turkey

**Antalya Algebra Days III**, May 16-20, 2001, Antalya, Turkey

**Antalya Algebra Days II**, May 17-21, 2000, Antalya, Turkey

**Sarımsaklı Mathematics Days**, June 5-8, 1997,

Balıkesir University, Balıkesir, Turkey

**Altınoluk Mathematics Days**, May 23-26, 1996,

Balıkesir University, Balıkesir, Turkey

**TALKS &  
SEMINARS**

*“Minimal Systems of Generators of Toric Varieties”*, 2 May 2008,  
METU-Bilkent Algebraic Geometry Seminars, Dept. of Math., METU, Ankara

*“Hilbert Function via Semigroup Gluing”*, 2 November 2007,  
METU-Bilkent Algebraic Geometry Seminars, Dept. of Math., Bilkent, Ankara

*“Generalized Riemann-Roch Theorem and Applications”*, 20 October 2004,  
Seminar on Algebraic Surfaces, Dept. of Math., METU, Ankara

*“Canonical Embedding”*, 20 December 2003,  
Seminar on Moduli of Curves, Dept. of Math., METU, Ankara

*“On the Set-Theoretic Complete Intersection”*, 8 May 2002,  
Commutative Algebra Group, Dept. of Math., Bilkent University, Ankara

**TEACHING  
EXPERIENCE**

*Linear Algebra I and II,*

*Calculus III and IV,*

*Abstract Mathematics I and II,*

*Abstract Algebra I and II,*

*Commutative Algebra(graduate level),*

*Algebraic Geometry(graduate level),*

*Introduction to Computational Algebraic Geometry,*

*Ideals, Varieties and Algorithms,*

*Algebra I and II (graduate level).*

**SCHOOLS  
& WORKSHOPS**

**School and Workshop on Local Rings and Local Study of Algebraic Varieties**  
Trieste, Italy, May 31- June 11, 2010.

**Summer School and Conference-Mathematics, Algorithms and Proofs**  
Trieste, Italy, August 11- 29, 2008.

**GTEM/TUBITAK Summer School ”Geometry and Arithmetic of Moduli  
Spaces of Coverings”**  
İstanbul, Turkey, June 9- 20, 2008.

**CIMPA Summer School ”Arrangements and Local Systems and Singularities”**  
İstanbul, Turkey, June 11- 22, 2007.

**Workshop on Combinatorics and Commutative Algebra II**  
Thessaloniki, Greece, August 27- September 1, 2007.

**Workshop on Combinatorics and Commutative Algebra I**  
Ioannina, Greece, September 4-9, 2006.

**School(and Workshop) on Computational Algebra for Algebraic Geometry  
and Statistics**  
Torino, Italy, September 6-11, 2004.

**Workshop on Singularity Theory**  
İstanbul, Turkey, June 25-29, 2001.

**GRANTS**

TÜBİTAK (The Scientific and Technical Research Council of Turkey)  
*“Families of Gorenstein Monomial Curves & Behavior of Their Hilbert Functions”*  
Grant No. TBAG (105T543)  
BAP (Balıkesir University Research Project)  
*“Algebraic Structures of Finite Free Resolutions”*  
Grant No. 2014/104  
BAP (Balıkesir University Research Project)  
*“Minimal Free Resolutions of the Associated Graded Rings of Monomial Curves”*  
Grant No. 2017/108

**COMPUTATION** Macaulay, Macaulay2, Singular, CoCoA  
**EXPERIENCE**