Prof. Dr. Murat Diker

Degrees earned:

Ph.D. in Mathematics, Hacettepe University 1991
M.S. in Mathematics, Hacettepe University 1987
B.Sc. in Mathematics, Ankara University, 1984

E-mail: mdiker@hacettepe.edu.tr

Hacettepe University
Department of Mathematics
06532 Beytepe Ankara

Publications:

1- M Diker, AA Uğur, *Fuzzy Rough Set Models Over Two Universes Using Textures*, Fuzzy Sets and Systems (in press).
2- AA Uğur, M Diker, *Generalized textural rough sets: Rough set models over two universes,* Information Sciences 521, 398-421 3 2020
3- M. Diker, AA Uğur, S Bayhan, *Textural formal context,* International Journal of Approximate Reasoning 114, 182-203 4 2019
4- M. Diker, AA Uğur, *Dicovering approximation spaces and definability*, International Journal of Approximate Reasoning 101, 255-275 2 2018
5- M. Diker, *Textures and fuzzy unit operations in rough set theory: An approach to fuzzy rough set models,* Fuzzy Sets and Systems 336 27-53 19 2018
6- M. Diker, AA Uğur, S Bayhan, *Textural unit operations in rough set theory,* Information Sciences 418, 153-168 5 2017
7- M. Diker *Textures and Rough Sets,* Handbook of Neural Computation, Elsevier Academic Press, 17-43, 2017
8- M. Diker, *A category approach to relation preserving functions in rough set theory,* International Journal of Approximate Reasoning, 56 (1) 71-86 2015
9- M. Diker, *Categories of rough sets and textures*, Theoretical Computer Science, 488, 46-65 2013
10- M. Diker, Ayşegül Altay Uğur, *Textures and dicovering based rough sets*, Information Sciences, 184 (1), 44-63 2012
11- M. Diker, *Definability and textures*, International Journal of Approximate Reasoning, 53 (4) 558-572, 2012
12- M. Diker, *Textures and Fuzzy Rough Sets,* Fundamenta Informaticae, 108 1-32, 2011
13- M. Diker, Textural approach to rough sets based on relations. Information Sciences, 180 (8), 1418--1433 (2010)
14- M. Diker, Ş. Dost, A. Altay Uğur, *Interior and closure operators on texture spaces-II: Dikranjan-Giuli Closure Operators and Hutton Algebras* Fuzzy Sets and Systems, (161) (7), 2010, 954-972
15- M. Diker, Ş. Dost, A. Altay Uğur, *Interior and closure operators on texture spaces-I : Basic Concepts and Čech Closure Operators*, Fuzzy Sets and Systems, 161 (7), 2010, 935-953
16- A. Altay Uğur, M.Diker, *Stone-Čech compactifications of texture Spaces,* Quaestiones Mathematicae, 32 15-33 2009.

17- A. Altay Uğur, M.Diker, *A Wallman type compactifications of texture spaces ,* Fuzzy Sets and Systems 157, 2683-2705 2006
18- M. Diker, *One point compactifications of ditopological texture spaces* , Fuzzy Sets and Systems 147, 233-248 2004
19- M. Diker, *Connectedness in ditopological texture spaces*, Fuzzy Sets and Systems 108 (2), 223-230 1999
20- L. M. Brown, M. Diker*, Paracompactness and full normality in ditopological texture spaces*, J. Math. Anal. Appl. 227, 144-165 1998
21- L. M. Brown, M. Diker, *Ditopological texture spaces and intuitionistic sets*, Fuzzy Sets and Systems 98 (1998), 217-224 1998
22- M. Diker, L. M. Brown, *The biweight of pairwise fine p-spaces,* Quaestiones Mathematicae 20 (2), 147-155 1997
23- L. M. Brown, M. Diker, *A bitopological view on weight and cardinality in almost stably locally compact spaces,* Annals of the New York Ac 788, 40-53, 1996
24- A. Altay Uğur, M.Diker, *An approach for the Stone–Čech type compactifications of plain texture spaces*, Int. J. Contemp. Math. Sci. 3(7), 331-337 2008.
25- M. Diker, *The counterparts of some cardinal functions in bitopological spaces I,* Mathematica Bohemica 120, 237–245, 1995.
26- M. Diker, *The counterparts of some cardinal functions in bitopological spaces II,* Mathematica Bohemica 120 (1995), 247–254

Conference Publications:

27- M. Diker, A. Altay Uğur, S. Bayhan, *Rough sets and textural neigbourhoods,* International Joint Conference on Rough Sets Tianjin, China (IJCRS2015) Lecture Notes in Artificial Intelligence Springer Verlag, (9436) 2015 190-202
28- M. Diker, *Categories of direlations and rough set approximation operators*, Rough Sets and Current Trends in Computing, Warsaw, Poland June-28-30 2010 Lecture Notes in Artificial Intelligence Springer Verlag, 2010: 288-298
29- 24- A. Altay Uğur, M.Diker, *A note on texture spaces*, Topology Proceedings, (33) 211- 223 2009
30- M. Diker, *Definability and Textural Rough Set Algebras*, Journal of Zhejiang Ocean University (Natural Science), Vol. 29, No. 5, 428-439, 2010
31- M. Diker, *A survey of texture spaces*, Proceedings of 6th International Pure Mathematics Conference, Quaid-i-Azam University Islamabad, 24-35 (1) 2008

Conferences:

• The International Conference on Scalable Uncertainty Management- Milan, Italy, October 3-5, 2018
• International Joint Conference, IJCRS 2016, Santiago de Chile, Chile, October 7–11, 2016
• International Joint Conference on Rough Sets, Tianjin, China, (IJCRS) 2015
• 7 th International Conference on Rough Sets and Current Trends in Computing Warsaw, Poland June-28-30 2010
• 24 th Summer Conference on Topology and Its Applications July 14-17, 2009 Faculty of Electrical Engineering and Communication, Brno University of Technology Brno, Czech Republic
• First International Workshop on Rough Sets Theory, 25-27 May 2009 Universit of Milano Bicocca, Milano, Italy
• Fifth International Conference of Applied Mathematics and Computing, August 12 -18, 2008 Plovdiv, Bulgaria.

• 22nd Summer Conference on Topology and Its Applications July 24-27, 2007 Universidad Jaume I, Castellon, Spain.
• The Oxford Conference on Topology and Computer Science in Honour of Peter Collins and Mike Reed August 7-10, 2006 Oxford, United Kingdom.
• The 6th International Pure Mathematics Conference 2005 (6th IPMC 2005) on Algebra, Geometry, Analysis, and Mechanics Quaid-i-Azam University Islamabad, Pakistan
• 19th Summer Topology Conference University of Cape Town, 5-9 July 2004 Cape Town, Republic of South Africa.
• 17. National Mathematics Semposium, İzzet Baysal University, Bolu 2004.

• Conference in Honor of Alexander Arhangelskii, Brooklyn College of the City University of New York , June 29- July 3, 2003 USA .
• Seminer, Frei University, Department of Mathematics, Berlin Germany 1998.

• 6. National Mathematics Semposium, East Mediterrranien University, Turkish Republic of Northern Cyprus, 1993.

Organizations and Research Projects

• (Co-Chair) International Conference on Applicable General Topology, Hacettepe

University, Department of Mathematics, Beytepe Ankara (14 August 2001)

(Supported by TÜBİTAK-The Scientific and Technological Research Council of Turkey).

• Interior-Closure Spaces, TÜBİTAK 1001, Project No: 107T310, 2009 (Project Leader) (Completed).

• Textural Approach to Rough Set Theory, TÜBİTAK 1001, Proje No: 109T683, 2013

(Project Leader) (Completed).

Awards and Grants

• Best Paper Award : International Rough Set Society and Chinese Association for Artificial Intelligence Tianjin University 2015

• Best Paper Award : Hacettepe Foundation (1999).

• DAAD (Free University, Berlin Germany) (German Academics Exchange) (1998).

• Goethe Institut, Prien, Germany (1995).

• Goethe Institut, Swaebischall Germany (1989).

Editor in Chief:

• Hacettepe Journal of Mathematics and Statistics 2014-2015,

• Hacettepe Journal of Mathematics and Statistics 2021-