

PROMOTION RECOMMENDATION
The University of Michigan-Dearborn
College of Arts, Sciences, and Letters

Yunus E. Zeytuncu, associate professor of mathematics, with tenure, College of Arts, Sciences, and Letters, is recommended for promotion to professor of mathematics, with tenure, College of Arts, Sciences, and Letters.

Academic Degrees:

Ph.D.	2010	Mathematics, The Ohio State University, Columbus, OH
B.S.	2004	Mathematics, Bilkent University, Ankara, Turkey

Professional Record:

2021– present	Associate Dean, College of Arts, Sciences, and Letters, University of Michigan-Dearborn
2017 – present	Associate Professor, Mathematics and Statistics, University of Michigan-Dearborn
2013 – 2017	Assistant Professor, Mathematics and Statistics, University of Michigan-Dearborn
2010 – 2013	Visiting Assistant Professor, Department of Mathematics, Texas A&M University

Summary of Evaluation:

Teaching: Professor Zeytuncu is rated excellent in teaching. An outstanding educator, Professor Zeytuncu has been recognized with the Michigan Association of State Colleges' Distinguished Professor of the Year Award as well as the Mathematical Association of America's Michigan Section Distinguished Teaching Award. Professor Zeytuncu regularly teaches a wide range of courses in mathematics, from elementary courses like Calculus I that satisfy the general education requirements to the capstone experience course in mathematics. Students find him inspiring, knowledgeable, and accessible. In classroom observations, his use of high impact practices like the presentation of individual or group projects is noteworthy.

Professor Zeytuncu's engagement with students extends well beyond the classroom. He is the director and PI for a nationally recognized Research Experiences for Undergraduates (REU) site funded by the National Science Foundation and National Security Agency. Over the last five years nine, students from this program have received prestigious NSF Graduate Fellowships and one has received the Alice T. Schafer Mathematics Prize. Perhaps more admirable is the fact that this REU site focuses on equitable access to mathematical research for undergraduates: half of all of participants have been women and one third identify as underrepresented minorities. His commitment to increasing diversity and inclusion in the STEM pipeline is further evidenced by his founding and direction of several programs that engage high school and middle school students from underserved communities in mathematical exploration including: the Maize and Blue Math Circle, Math Corps, and Math Matches.

Research: Professor Zeytuncu is rated excellent in research. A nationally recognized expert in several complex variables, operator theory, and complex geometry, Professor Zeytuncu works in several important areas including the study of the Bergman projection operator and the spectral theory of the Kohn-Laplacian. His innovative work is published in highly respected journals including the *European Journal of Mathematics*, the *Pacific Journal of Mathematics*, and the *Bulletin of the London Mathematical Society*.

Professor Zeytuncu is an extremely prolific mathematician, publishing seventeen journal articles in three distinct sub-areas since his external review for his last promotion in 2016, with a number of these representing significant breakthroughs in the field. As further evidence of the high quality of his research program, Professor Zeytuncu has secured more than \$1 million in funding and has an additional \$1.2 million NSF grant proposal submitted in collaboration with the top researchers in his field.

Recent and Significant Publications:

Chen, L. and Zeytuncu, Y. E., (2016) “Weighted Bergman Projections on the Hartogs Triangle: Exponential Case,” *New York J. Math.*, vol. 22, pp. 1271-1282.

Sahutoglu, S. and Zeytuncu, Y. E., (2017) “On Compactness of Hankel Operators and the ∂ -Neumann operators on Hartogs Domains in C^2 ”, *J. Geom. Anal.*, vol 27, no. 2, pp. 1274-1285.

Harrington, P. S. and Zeytuncu, Y. E., (2019) “ L^p Mapping Properties for the Cauchy-Riemann Equations on Lipschitz Domains Admitting Subelliptic Estimates,” *Complex Var. Elliptic Equ.*, no. 3, 369-385.

Zeytuncu, Y. E., (2020) “A Survey of the L^p Regularity of the Bergman Projection,” *Complex Analysis and its Synergies*, vol.6, no. 16.

Sahutoglu, S. and Zeytuncu, Y. E., (2021) “On compactness and L^p regularity in the ∂ -Neumann problem,” to appear in *Bull. Lond. Math. Soc.*

Balay, M., Neutgens, T., Rosen, N. Wagner, N. A., and Zeytuncu, Y. E., (2021) “ L^p Regularity of Toeplitz Operators on Generalized Hartogs Triangles,” to appear in *Eur. J. Math.*

Service: Professor Zeytuncu is rated excellent in service and his record is both impressive and impactful. He currently serves as the associate dean of the College of Arts, Sciences, and Letters (CASL) and has been an elected member of the Department Executive Committee and the CASL Executive Committee. Much of his work involves undergraduate research including co-organizing the National Polymath REU, an online research experience for more than 300 students nationwide, serving on the Council on Undergraduate Research in Washington D.C., serving as CASL Student Research Coordinator, and chairing the Summer Undergraduate Research Experience Planning and Organizing Committee. He is also extremely active in the professional mathematical community, organizing sessions at multiple national conferences including the Joint Mathematics Meetings and several American Mathematical Association Special Sessions, as well as regional conferences including the Midwest Several Complex Variables Conference. Professor Zeytuncu has refereed numerous journal articles and has written many reviews for MathSciNet and zbMath.

External Reviewers:

Reviewer A: “Yunus Zeytuncu is a prominent member of the several complex variables community whose active, influential, and expanding research program in multidimensional complex analysis makes him an outstanding candidate for promotion.”

Reviewer B: “Dr. Zeytuncu is a leader in this area and he and his colleagues have produced a number of good results.”

Reviewer C: “Yunus Zeytuncu has made significant and important contributions to the areas of complex analysis and operator theory. His work is innovative and original, and he has established himself as central figure in his field.”

Reviewer D: “His reputation in the community is clear, having been invited to present many talks and to serve on multiple NSF panels, submitting NSF proposals with three of the top analysts in closely related fields, and producing a deep and respected body of work in important problems in several variables.”

Reviewer E: “He has written many first rate mathematical papers related to mapping properties for Hankel operators, Bergman projections and the spectral properties of the Kohn Laplacians.”

Reviewer F: “In the past few years after his promotion to tenured associate professor, he has been most productive and has achieved another level of mathematical depth. I would rank him most favorably against any young complex analyst.”

Summary of Recommendation: Professor Zeytuncu is a nationally recognized mathematician, authoring significant and groundbreaking work and an engaged educator, bringing innovation and a commitment to excellence to his classroom and to the community at large. I am extremely pleased to recommend, with strong support of the College of Arts, Sciences, and Letters Executive Committee, Yunus E. Zeytuncu for promotion to professor of mathematics, with tenure, College of Arts, Sciences, and Letters.



Martin J. Hershock, Dean
College of Arts, Sciences, and Letters



Domenico Grasso, Chancellor
University of Michigan-Dearborn

May 2022