

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

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

Academic Degrees:

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

Professional Record:

2013 – present Assistant Professor of Mathematics, Department of Mathematics and Statistics, University of Michigan-Dearborn  
2010 – 2013 Visiting Assistant Professor, Department of Mathematics, Texas A&M University, College Station, TX

Summary of Evaluation:

Teaching: Professor Zeytuncu's teaching is rated as excellent. His outstanding teaching accomplishments were recognized by a nomination for the University's Distinguished Teaching Award in winter 2016. Professor Zeytuncu has taught nine lower division courses, three upper division courses, and two independent study courses since joining the faculty in fall 2013. Student assessment of his twelve courses are uniformly high in terms of their average numerical responses; the open-ended comments praise his enthusiasm, passion, knowledgeability and student engagement. Technology plays an integral part of his teaching in the form of online homework (WeBWork) and the use of learning management systems (Canvas). In addition, Professor Zeytuncu's teaching activities have reached beyond the traditional classroom setting by organizing the Maize and Blue Math Circle program which provides mathematics enrichment to talented high school students in the region, organizing two summer nREU (Research Experience for Undergraduates Program for minority students) programs supported by NSF funding; and supervising several undergraduate research projects.

Research: Professor Zeytuncu's research is rated as excellent. Since joining the faculty in 2013, Professor Zeytuncu has had 13 articles published or accepted by peer-reviewed journals. In addition, he has been awarded over \$100,000 external and internal funding, made at least 15 invited presentations; served on five research conference organizing committees, and reviewed or refereed 28 articles or book chapters.

Recent and significant publications:

Zeytuncu, Y.E., "Regularity of Canonical Operators and Nebenhulle: Hartogs Domains," *J. Math. Anal. Appl.* 409, pp. 239-246, 2014.  
Zeytuncu, Y. E., "A Note on the Nebenhulle of Smooth Complete Hartog Domains," *Houston J. Math.* 40, pp.353-357, 2014.

- Zeytuncu, Y. E., "The Fundamental Theorem of Algebra and the Divergence of the Reciprocals of the Primes Looked at Through Bergman Spaces," *Bull. Korean Math. Soc.* 52, pp. 699–705, 2015.
- Sahin, A., Cavlazoglu, B. Zeytuncu, Y. E., "Flipping a college Calculus course: A case study," to appear in *Journal of Educational Technology & Society*, vol. 18, no. 3, pp. 142–152, 2015.
- Munasinghe, S. and Zeytuncu, Y. E., "Irregularity of the Szego Projection on Bounded Pseudoconvex Domains in  $C^2$ ," *Integral Equations and Operator Theory*, vol. 82, no. 3, pp. 417-422, 2015.
- Munasinghe, S. and Zeytuncu, Y. E., "Lp Regularity of Weighted Szego Projections on the Unit Disc," *Pacific Journal of Mathematics*, vol. 276, no. 2, pp. 449–458, 2015.
- Straube, E. J., Zeytuncu, Y. E., "Sobolev Estimates for the Complex Green Operator on CR-submanifolds of  $C^n$  of Hypersurface Type," *Inventiones Mathematicae*, vol. 201, no. 3, pp. 1073–1095, 2015.
- Chakrabarti, D. and Zeytuncu, Y. E., "Lp Mapping Properties of the Bergman Projection on the Hartogs Triangle." *Proc. of Amer. Math. Soc.* vol. 144, no.4, pp. 1643-1653, 2016.
- Cuckovic, Z. and Zeytuncu, Y. E., "Mapping Properties of Weighted Bergman Projection Operators on Reinhardt Domains." to appear in *Proc. of Amer. Math. Soc.*
- Hristova, Y. and Zeytuncu, Y. E., "Why do we need the derivative for the surface area?" to appear in *PRIMUS*.
- Celik, M. and Zeytuncu, Y. E., "Nilpotent Toeplitz Operators on Reinhardt Domains," to appear in *Rocky Mountain Journal of Mathematics*.
- Celik, M. and Zeytuncu, Y. E., "Hilbert-Schmidt Hankel Operators with Anti-holomorphic Symbols on Complete Pseudoconvex Reinhardt Domains." to appear in *Czechoslovak Mathematical Journal*.
- Zeytuncu, Y. E., "An Application of the Prekopa-Leindler Inequality and Sobolev Regularity of Weighted Bergman Projections." to appear in *Acta Sci. Math.* (Szeged).

Service: Professor Zeytuncu's service is rated as excellent. Professor Zeytuncu has served on the Department Executive Committee, Department LEOs Review Committee; the College Undergraduate Research Task Force and the University Research Support Committee. Professor Zeytuncu founded the Maize and Blue Math Circle program in winter 2014 and has served as its organizer and coach ever since. This program has provided a valuable and important opportunity to some of the talented local high school students by enriching them with challenging Math projects. The program's success was recently recognized with a two-year grant from the Ford Foundation. Professor Zeytuncu was a co-organizer and the driving impetus behind UM-D's first ever Analysis Day conference in April 2016, which brought together researchers from several areas in mathematical analysis. Professor Zeytuncu has reviewed or refereed numerous articles and organized five research conferences as service to the profession.

External Reviewers:

Reviewer A: "Zeytuncu's work holds up well alongside that of his peers in the area of several complex variables; even better, from my vantage point, he is cooperating well with those peers to the great benefit of the subject..."

Reviewer B: "These superior contributions to both teaching and service represent icing on the cake of a productive, successful research program in multidimensional complex analysis..."

Reviewer C: "In particular, his publication list shows strong evidence of continued scholarship (often with established researchers) in good research journals, and his work with REU students and

the Math Circle shows notable commitment and dedication to the profession...”

Reviewer D: “Zeytuncu has had 16 papers accepted by solid mathematical research journals, so his production is unusually high. ... it is worth noting that he is averaging at least one solid solo publication per year, which is unusual for an early career mathematician.”

Reviewer E: “His teaching looks great, his service is very good, and his research is thriving. Hence he would be seriously considered.”

Reviewer F: “My overall assessment is that Dr. Zeytuncu is a prolific researcher with exceptional promise, and I rate him as one of the best untenured complex analysts that I know. ... You struck gold when you hired him!”

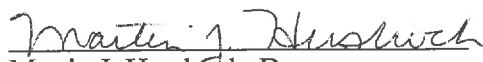
Reviewer G: “..., I am happy to say with complete confidence that Dr. Yunus Zeytuncu excels at all three of the fundamental components of the academic career: research; service and teaching abilities.”


Reviewer H: “Dr. Zeytuncu is a researcher with an impressive record. He has published significant results in prestigious journals. He has clearly established himself as among the best of his generation.”

Reviewer I: “Zeytuncu is a hard-working and prolific young mathematician. He has only been out six years and has already produced 24 good papers. Many mathematicians only produce 24 papers in a lifetime. These papers are all of good quality, and many of them are excellent.”

Summary of Recommendation:

Professor Zeytuncu has been rated excellent in the areas of teaching, research, and service. He has been an outstanding instructor in the classroom and has elevated mathematical discourse throughout the department by his role as the organizer and coach for the Maize and Blue Math Circle and his involvement in student research with the nREU program. His research output is extraordinary with excellent scholarly work appearing in a wide variety of prestigious journals. His service is likewise extraordinary from his commitment to raising the research profile at UMD by organizing the Analysis Day conference to his careful attention on the department’s Executive Committee. We are pleased to recommend, with strong support of the College of Arts, Sciences, and Letters Executive Committee, Yunus E. Zeytuncu for promotion to associate professor of mathematics, with tenure, Department of Mathematics and Statistics, College of Arts, Sciences, and Letters.

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

  
Daniel Little, Chancellor  
University of Michigan-Dearborn

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