

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

Alan D. Wiggins, 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. 2007 Texas A&M University, College Station, TX
B.A. 1999 Indiana University, Bloomington, IN

Professional Record:

2009 – present Assistant Professor of Mathematics, Department of Mathematics and Statistics,
University of Michigan-Dearborn
2007 – 2009 Assistant Professor, Department of Mathematics, Vanderbilt University,
Nashville, TN

Teaching: Professor Wiggins is rated excellent in teaching. Professor Wiggins has taught many sections of five lower division courses, five distinct upper division courses, and four independent study courses. Student assessment of his eighteen sections taught over the past four years are uniformly high in terms of their average numerical responses; the open-ended comments praise his enthusiasm, passion, and knowledge ability.

Research: Professor Wiggins is rated excellent in research. The focus of Professor Wiggins' work is on von Neumann algebras, a generalization of the idea of a number system equipped with conjugation. This is pure mathematics. His passion for pure mathematics manifests itself in several ways within the department: He is a perennial contributor to the department's seminar series (nine talks in the past four years); he has shared his enthusiasm with undergraduates by conducting four reading courses in as many years, and has a recent scholarly submission with a colleague in the department.

Recent and Significant Publications:

Sinclair, A., Smith, R.R., White, S., and Wiggins, A., "Strong Singularity of Masas in II₁ Factors," *Illinois Journal of Mathematics*, Volume 51, no. 4, 2007 1077- 1084, 2007.
White, S., and Wiggins, A., "Semi-Regular Masas of Transfinite Length," *International Journal of Mathematics*, vol. 18, no. 9, 2007, pp. 995-1007.
Smith, R.R., White, S., and Wiggins, A., "Normalizers of Irreducible Subfactors", *Journal of Mathematical Analysis and Applications*, Volume 352, no. 2, 2009, 684-695.
Fang, J., Smith, R.R., White, S., and Wiggins, A., "Groupoid normalizers of tensor products," *Journal of Functional Analysis*, vol. 258, no. 1, 2010, pp. 20-49.
Grossman, P., and Wiggins, A., "Strong Singularity for Subfactors," *Bulletin of the London*

Mathematical Society, Vol. 42, no. 4, 2010, pp. 607-620.

Cameron, J., Christensen, E., Smith, R.R., Sinclair, A., White, S., and Wiggins, A., "A Remark on the Similarity and Perturbation Problems," *C. R. Math. Acad. Sci. Soc. R. Can.*, to appear.

Cameron, J., Christensen, E., Smith, R.R., Sinclair, A., White, S., and Wiggins, A., "Type II₁ Factors Satisfying the Spatial Isomorphism Conjecture," *Proc. Natl. Acad. Sci. USA*, to appear.

Service: Professor Wiggins is rated excellent in service. Professor Wiggins has served on a number of committees at the department and college levels. He has served as the department's technology guru, representing it on the CASL Tech Committee, and the Online Learning Advisory Committee. He serves as the chair of our website committee, where he takes a very hands-on role in shaping the site's appearance and content. He served on the pure math hiring committee in Fall 2012, helping screen over 400 applicants to find the two most suitable for our campus. Professor Wiggins has almost single-handedly resurrected our colloquium/seminar series with regularly scheduled speakers from inside and outside the campus, and brings this expertise to the selection of guest speakers for the Turfe Lecture Series, an annual event funded by a friend of the Department and University.

External Reviewers:

Reviewer A: "Recently, Alan together with five co-authors has proved some exciting results about two fundamental problems in the theory of operator algebras, namely, the Kadison-Kastler Conjecture and the similarity problem. ...The fact that this summary was published in the Proceedings of National Academy of Sciences is testimony to the importance of the research."

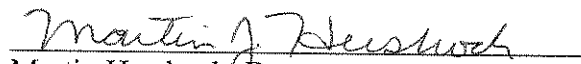
Reviewer B: "Wiggins is a very powerful [junior] mathematician working in extremely technically demanding areas of operator algebras. ...I believe Wiggins to be entirely deserving of tenure at this stage in his career. He has achieved a lot already and holds promise for major future development."


Reviewer C: "Perhaps the paper that I found the most innovative is the very recent one (by the same team of 6) on Kadison-Kastler stable factors. ...This is really an outstanding paper. ...In conclusion, I think Dr. Wiggins' research record is quite convincing. With seven papers published in major journals and two more submitted, it is clear that Dr. Wiggins' work amply justifies (and in fact exceeds) the usual requirements for tenure and promotion."

Reviewer D: "I think the paper on singularity implying strong singularity, as well as the paper with Pinhas Grossman (probably the only instance I know of the methods of planar algebras being used to say something about singular subfactors), are certainly interesting and non-trivial."

Reviewer E: "Very carefully written and provide complete and clear answers to a number of natural problems and questions in the theory of von Neumann algebras. ...More recent work is of a very different nature. ...To reach this goal, the authors have to combine a plethora of results from the von Neumann algebra literature with very ingenious and original constructions and methods."

Summary of Recommendation: Professor Wiggins has been rated excellent in the areas of teaching, research, and service. He has been successful in the classroom and has elevated mathematical discourse throughout the department by his role as the seminar/colloquium director. His research output is extraordinary with excellent scholarly work appearing in a wide variety of excellent publications. His service is likewise extraordinary, accepting cheerfully and energetically each invitation to serve. We are very pleased to recommend, with strong support of the College of Arts, Sciences, and Letters Executive Committee, Alan D. Wiggins for promotion to associate professor of mathematics, with tenure, Department of Mathematics and Statistics, College of Arts, Sciences, and Letters.


Martin Herschock, Dean
College of Arts, Sciences, and Letters


Daniel Little, Chancellor
University of Michigan-Dearborn

May 2014