

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Tasho Kaletha, associate professor of mathematics, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of mathematics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2010	The University of Chicago
Diplom (equivalent to Masters)	2005	University of Bonn

Professional Record:

2016–present	Associate Professor, Department of Mathematics, University of Michigan
2014–2016	Benjamin Peirce Fellow, Department of Mathematics, Harvard University
2013–2015	Assistant Professor, Department of Mathematics, Princeton University
2010–2013	Veblen Research Instructor, Institute for Advanced Study, Princeton University

Summary of Evaluation:

Teaching: Since joining the University of Michigan in 2016, Professor Kaletha has taught courses ranging from the standard undergraduate advanced calculus course to a specialized graduate course in number theory. His teaching evaluations have been consistently excellent, with median scores from his classes ranging from 4.7 to a perfect 5, and half of them have been 4.9 or higher. In addition to his classroom teaching, Professor Kaletha is the advisor of two doctoral students and the mentor of three post-doctoral researchers. He has also supervised two students in a project under the Research Experiences for Undergraduates (REU) program sponsored by the National Science Foundation.

Research: Professor Kaletha has firmly established himself as one of the leaders in the Langlands program, a vast web of conjectures connected to some of the most important open problems in number theory. Part of his work is recasting the foundations of the area, unifying previously disparate directions of research, providing a vision and direction to other mathematicians, and opening up possibilities of applications to other areas of number theory. His recent work is filled with deep mathematics and long single-authored publications in the most prestigious journals. Overall, his presence here at Michigan is a significant factor contributing to the strength and profile of our number theory group.

Recent and Significant Publications:

Kaletha, T. (2019). Regular supercuspidal representations. *Journal of American Mathematical Society*, 32, 1071-1170.

Kaletha, T. (2018). Rigid inner forms vs isocrystals. *Journal of the European Mathematical Society*, 20(1), 61-101.

Kaletha, T. (2018). Global rigid inner forms and multiplicities of discrete automorphic representations. *Inventiones Mathematicae*, 213(1), 271-369.

Kaletha, T. (2016). The local Langlands conjectures for non-quasi-split groups. In W. Müller, S. W. Shin, and N. Templier, (Eds.), Families of Automorphic Forms and the Trace Formula (pp. 217-257). Simons Symposium Springer.

Service: Professor Kaletha has performed important service work for the Department of Mathematics, most notably as an elected member of its Executive Committee in 2019–20. He has also served continuously from his arrival in 2016 on the committee that oversees our REU program. He was a faculty adviser to our Undergraduate Math Club for two years and a member of the Honors Committee in 2019–20. Outside the University of Michigan, Professor Kaletha has organized several prestigious conferences and workshops. He has also served as a referee for journal publications and for grant proposals.

External Reviewers:

Reviewer (A): “One of Kaletha’s major accomplishments, in my opinion, is to unify the real and p -adic cases, in a very strong version of what is sometimes known as the Lefschetz principal ... Kaletha has already established himself as the leader in his field; written a number of important papers in top journals; has a preprint which is a major advance in the field; and has set the stage for the long-sought proof of the local Langlands conjectures.”

Reviewer (B): “His work on p -adic groups relies on a [sic] technical expertise and clarity of thought that in my opinion is presently unmatched in this area...Kaletha is a very strong mathematician, one of the best two or three in the general areas of representation theory and the Langlands program [of his generation].”

Reviewer (C): “...the case for promotion here is so obvious that I can make it in a short email. In my opinion, Tasho Kaletha is the strongest person working on the representation theory of p -adic groups and the arithmetic Langlands program today.”

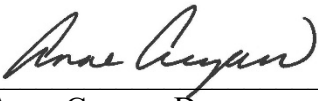
Reviewer (D): “Tasho is a world leader on the conjectural local Langlands correspondence ... The work related to [discovery of rigid inner forms and their applications] is absolutely fundamental to the field.”

Reviewer (E): “Several of his papers are indispensable for anyone who hopes to understand the general local Langlands correspondence ... Kaletha’s work is fundamental to the project to develop a complete representation theory of p -adic groups. His results are deep and difficult and he has made it increasingly likely that we will have a complete theory within the next decade or so. He has also been extraordinarily active in setting the agenda for the field, as a lead organizer of the most important international meetings on three continents.”

Reviewer (F): “Kaletha’s work on inner forms and the Langlands correspondence is truly outstanding ... Kaletha’s results rank among the most significant advances in the Langlands program in recent years.”

Summary of Recommendation:

Professor Kaletha continues to have an immense impact, worldwide, on his research field. His results are fundamental for the work of many others, because he contributes not only technical results but the right way to understand various phenomena. In another direction, he exerts an impact on the future of mathematics by his work with undergraduate students in his classes and in the REU program. Professor Kaletha has done excellent work, in particular establishing himself as one of the world's top researchers in his field. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Tasho Kaletha be promoted to the rank of professor of mathematics, with tenure, College of Literature Science, and the Arts.



Anne Curzan, Dean
Geneva Smitherman Collegiate Professor of
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