

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

Jun Zhang, associate professor of psychology, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of psychology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1992	University of California, Berkeley
B.S.	1985	Fudan University

Professional Record:

2006	Visiting Research Scientist, Brain Science Institute, RIKEN
1999	Visiting Associate Professor, Department of Psychology, University of Waterloo
1999	Visiting Senior Lecturer, Department of Psychology, University of Melbourne
1998 – present	Associate Professor, Department of Psychology, University of Michigan
1992 – 1998	Assistant Professor, Department of Psychology, University of Michigan

Summary of Evaluation:

Teaching – Professor Zhang’s primary teaching role has been a large introductory course, psychology as a natural science. In his mathematical psychology course students learn how to take intuitions about psychological processes and convert them to testable and observable claims about human behavior. He has published original pieces of scholarship with several of his graduate students. He is a demanding teacher and very serious about his performance as an instructor. Students give his teaching and mentoring a positive evaluation.

Research – Professor Zhang’s area of research is in mathematical psychology, an area where mathematical tools are used to represent psychological processes in order to rigorously describe their formal rules of operation. He is an international leader in his field and is viewed by peers to be among the top in his cohort. His productivity since promotion has been solid, with twelve articles in peer-reviewed journals and two book chapters. He recently received two research grants and was invited to give the Winter Memorial Guest Lecture at Purdue University (2003).

Recent and Significant Publications:

- “Statistical manifold as an affine space: A functional equation approach,” with P. Hasto, *Journal of Mathematical Psychology*, 50, 2006, pp. 60-65.
- “A method to unconfound orientation and direction tunings in neuronal response to moving bars and gratings,” *Journal of the Optical Society of America, A*, 22, 2005, pp. 2246-2256.
- “Binary choice, subset choice, random utility, and ranking: A unified perspective using the permutahedron,” *Journal of Mathematical Psychology*, 48, 2004, pp. 107-134.
- “Dual scaling between comparison and reference stimuli in multidimensional psychological space,” *Journal of Mathematical Psychology*, 48, 2004, pp. 409-424.

Service – Professor Zhang has served on several departmental committees, including graduate admissions, the augmented executive committee, and the computing committee. He has also served on the College's Grievance Review Board. Nationally, he chaired the annual meetings of the Society for Mathematical Psychology and serves as associate editor of the *Journal of Mathematical Psychology*.

External Reviews:

Reviewer (A)

"I think that Jun is one of the leaders in mathematical psychology today, and he is greatly respected among the other leaders, especially those who value deep theoretical work. He is clearly a force in this area internationally..."

Reviewer (B)

"...his reputation for being an excellent mathematical psychologist is generally accepted by everyone in this field. He is well known for developing very sophisticated and elegant mathematical modeling applications to psychology."

Reviewer (C)

"Jun Zhang's standing in his field is excellent. He is highly regarded both for the breadth and depth of his contributions. He is well respected for attacking difficult problems and for the high sophistication of his mathematics."

Reviewer (D)

"Jun has earned high visibility and respectable status in the Society for Mathematical Psychology and in the European Mathematical Psychology Group."

Reviewer (E)

"Dr. Zhang has developed a highly visible and significant program of research in the areas of formal modeling, quantitative methodology, and mathematical analysis, and has quickly established himself as one of the leading theorists in mathematical psychology. I find his knowledge and sophistication in advanced mathematics incredibly deep and peerless."

Reviewer (F)

"There are very few psychologists--including mathematical ones--who have the breadth of knowledge and mathematical skills as Zhang who are involved in such important, cutting-edge, interdisciplinary issues such as game theory, social choice theory, and computational vision."

Reviewer (G)

"Dr. Zhang is held in very high esteem by colleagues in Mathematical Psychology. He is seen as one of the most talented people in the field."

Reviewer (H)

"I regard Jun as one of the most accomplished and sophisticated researchers currently working in mathematical psychology. He has a powerful analytic intelligence that has enabled him to make contributions to the very abstract field of information geometry."

Reviewer (I)

“...Zhang is a top-drawer, terrifically respected mathematical and theoretical psychologist. My expectations are that he will make some of the most valuable contributions to theoretical psychology and cognitive science that will occur in the first part of the 21st century.”

Summary of Recommendation:

Professor Zhang has demonstrated intellectual leadership in the field of mathematical psychology. He is an accomplished teacher, and his service contributions are recognized internationally. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Jun Zhang be promoted to the rank of professor of psychology, with tenure, in the College of Literature, Science, and the Arts.



Terrence J. McDonald
Arthur F. Thurnau Professor,
Professor of History, and Dean
College of Literature, Science, and the Arts

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