

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

Stilian A. Stoev, assistant professor of statistics, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of statistics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2005	Boston University
M.S.	1998	Sofia University

Professional Record:

2005 – present Assistant Professor, Department of Statistics, University of Michigan

Summary of Evaluation:

Teaching – Professor Stoev is a dedicated teacher who is highly effective in the classroom. He has taught two courses at the undergraduate level and two at the graduate level. Student evaluations are on a par with other faculty who have taught these courses. He has supervised four Ph.D. students, one of whom graduated in 2008. In addition to graduate student mentoring, he has supervised an honors thesis and an Undergraduate Research Opportunity Program (UROP) project.

Research – Professor Stoev’s research focuses on properties of long-range dependence and extreme values of data contained in time series and stochastic processes. A major part of his research considers the properties of models that are useful for studying these subfields. His work is original and covers important theoretical insights, methodological developments, and innovative interdisciplinary collaborations. Professor Stoev has 21 papers published or soon to appear in journals, and two papers on conference proceedings. His reputation has grown steadily and he has been invited to speak at quite a few international conferences and department seminars. He is currently the principal investigator (PI) of a National Science Foundation grant and a National Security Agency grant. He is also associate editor of *Bernoulli*, the flagship journal of the Bernoulli Society, one of the leading societies in the world in theoretical statistics and probability.

Significant Publications:

- “On the association of sum– and max–stable processes,” with Y. Wang, *Statistics and Probability Letters*, 80, 2010, pp. 480–488.
- “On the estimation of the extremal index based on scaling and resampling,” with K. Hamidieh and G. Michailidis, *Journal of Computational and Graphical Statistics*, 18, 2009, pp. 731–755.
- “On the ergodicity and mixing of max–stable processes,” *Stochastic Processes and their Applications*, 118, 2008, pp. 1679–1705.
- “Extremal stochastic integrals: a parallel between max–stable processes and α –stable processes,” with M. S Taqqu, *Extremes*, 8, 2005, pp. 237–266.

Service – Professor Stoev has served on various departmental committees, including the Executive, Curriculum, and Information Technologies committees. He is considerate and dependable.

External Reviews:

Reviewer (A)

“It’s clear from an even cursory inspection of Stilian’s CV that he has an excellent research record. ... I am always struck by Stilian’s ability to take a fresh look and provide new insight into problems that have been considered before. ... It is difficult to find any weaknesses in Stilian’s professional record. He has developed a strong and mature research program that has received external funding...”

Reviewer (B)

“In his [peer] group, Stilian is without doubt one of the strongest researchers in his field of expertise. I am convinced that he will grow into a very strong academic... Within mathematics, probability theory is experiencing a renaissance...top-candidates [sic] are highly sought after... Stilian is one of the very rare true talents in this respect.”

Reviewer (C)

“Prof. Stoev is an applied probabilist of impressive breadth for someone at this stage of his career. His interests tend towards stochastic process modeling, typically motivated by concrete applications of real importance... Prof. Stoev has demonstrated an impressive knack in his work for seamlessly bridging the canonical theory/application divide.”

Reviewer (D)

“...Stilian Stoev matches the very best of today’s fine probabilists [of his generation] who show enormous theoretical scholarship accompanied by a serious involvement in current application. ...I believe that U. Mich. is very fortunate to have this scholar among its faculty...”

Reviewer (E)

“His research is excellent, spanning pure and applied probability and statistics. He is a trustworthy, dependable colleague. In my view, he merits tenure and promotion.”

Reviewer (F):

“...I was always excited by his conference presentations which were very well prepared and, although technical, very clear in their exposition. ... He has a great research potential, is full of new research ideas and has an excellent background in mathematics, probability theory and statistics.”

Reviewer (G)

“He is incisive, curious, powerful, and capable of growth and significant accomplishment in new areas. His abilities and background are very broad and range over probability, statistics, computer science and engineering. He is a strong mathematician who appreciates and is comfortable with the computer. He is comfortable handling data. I believe this type of person is ideal for a modern statistics department and is crucial to ensure statistics departments thrive and survive.”

Reviewer (H)

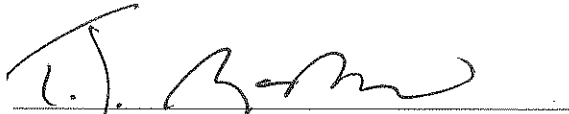
“He is able to span the entire range from advances of basic theory to successful and substantial application to important practical problems. He has shown very considerable skills in abstract mathematics, in invention of new estimation methods, in statistical computations, and in contributing to the solution of important technological and scientific problems.”

Reviewer (I)

“...I am very impressed with the level of Stilian’s intellectual activities, his curiosity and openness to new ideas and directions. He has been very productive, and many of his papers have appeared in top level professional journals. I also believe that we have seen only a small part of what Stilian is capable of, and we will see much more in the years to come.”

Summary of Recommendation:

Professor Stilian Stoev is a leading researcher in his field and an excellent teacher and mentor. He has been providing valuable service to the Department and to the profession. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Stilian A. Stoev be promoted to associate professor of statistics, with tenure, 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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