



SDI Review Form 1.6

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_49023
Title of the Manuscript:	Empirical Convergence Rate of a Markov Transition Matrix
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	<p>The convergence rate of a Markov transition matrix is governed by the second largest eigenvalue, where the first largest eigenvalue is unity, under general regularity conditions. Garren and Smith (2000) constructed confidence intervals on this second largest eigenvalue, based on asymptotic normality theory, and performed simulations, which were somewhat limited in scope due to the reduced computing power of that time period. Herein we focus on simulating coverage intervals, using the advanced computing power of our current time period. Thus, we compare our simulated coverage intervals to the theoretical confidence intervals from Garren and Smith (2000).</p> <p>This paper is written well and logically organized. More examples are provided to show the less conservative results than others. However, the following points should be further addressed in the revision before I recommend the paper for publication.</p> <p>1) It seems that the technique of this paper is well-known. The authors must clearly show the difference and improvements in comparison with the existing results in the view of technique analysis.</p> <p>2) The motivation on why to propose such a framework and strategy in real-world applications should be clearly emphasized. It would be much better if some guideline remark words on practical applications should be given.</p>	<p>I agree with the referee, and I answered both of the referee's queries in yellow at the end of section 2.</p>
<u>Optional/General</u> comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	