



SDI Review Form 1.6

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_41536
Title of the Manuscript:	Refinements of Gaussian Tail Inequality
Type of the 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)
Compulsory REVISION comments		
Minor REVISION comments	This manuscript provides certain bounds, stricter than the Gaussian tail bounds for $0 < t \leq 1/2$, as well as a number of other refinements concerning the Gaussian tales. General rules about the format of the expressions: (a) Please put a full stop at the end of an equation line if your sentence ends there, or put a comma if your sentence continues after the equation line. (b) When you write in-line mathematical expressions, avoid (when it is possible) large mathematical notations. For example, you can write $f(x) = x/(1-x)$ instead of $f(x) = \frac{x}{1-x}$. Otherwise, use equation lines, where a new line is devoted for those expressions, for example $f(x) = \frac{x}{1-x}.$ Please apply the above general rules throughout your manuscript. Here are some minor revision comments: Note: The text in red below represents the suggested changes/additions. Page 3. Line of Proof of Theorem 1: Please rewrite as "The probability density function (p.d.f.) of X is given by". Eq. after Proof of Theorem 1: Please put an equation number, in this case (2.1), at the right end of this equation line. Since you are a LaTeX user, the rest of the equation number will adjust automatically. Put also a full stop at the end of the eq. line. Please apply General Rule (a) throughout the manuscript. Line after the first equation line of Proof of Theorem 1: Please rewrite as "We then have,". Eq. (2.1): The eq. number should now be (2.2). Put also a full stop at the end of the equation line. Please apply General Rule (a) throughout the manuscript.	noted



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	Page 4. Two lines after eq. (2.2): Please rewrite as “Since $x \leq t$, it holds,” (delete the line “therefore”). Page 5. Line before eq. (2.3): Please rewrite as “...Tail inequality (GTI) for $0 < t \leq 1/2$, we shall show that...”. Please apply General Rule (b) throughout the manuscript. Lines 1, 2, and 3 after eq. (2.3): Please rewrite as “Since $e^{t^2/2} \leq e^{1/8}$ for $0 < t \leq 1/2$, it can be easily verified that $e^{1/8} < 6/5$. This implies,”. Please apply General Rule (b) throughout the manuscript. Page 6. Line of Proof of Theorem 2: Please rewrite as “The p.d.f. of X is given as in (2.1),” and delete the eq. line after it. Page 7. Eq. after eq. (2.5): In the middle part of this equation replace “(by (3.2.4))” with “(by (2.4))”. Page 8. 1st eq. of this page: In the second part of this equation replace “(by (3.2.4))” with “(by (2.4))”. Page 9. Line after the 2nd eq. of this page: Please rewrite as “...which shows that the bound obtained in Theorem 2...”. Line of Proof of Theorem 3: Please rewrite as “The p.d.f. of X is given as in (2.1), while we have” and delete the eq. line after it as well as the line “we have”. Page 10. Line after eq. (2.9): Please rewrite as “Since $\phi(x)$ is a decreasing function for $x \geq 0$, it follows...”. Page 11. Paragraph after the end of Remark 3: Please rewrite as “Finally, in this section we present...”. Page 12. Paragraph of Proof of Lemma 1: Please rewrite as “The p.d.f. of X is given as in (2.1).” Moreover, put a comma at the end of this paragraph, i.e. “...and $t > 0$,”. Line of Proof of Theorem 4: Please rewrite as “The p.d.f. of X is given as in (2.1), while we have” and delete the eq. line after it as well as the next line “We have,”.	
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Optional/General comments		
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