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1. FOREWORD

On behalf of the Organizing Committee, we are very pleased to welcome you to the 3\textsuperscript{rd} International Conference of Mathematical Sciences (ICMS 2019) to be held between 4-8 September 2019 at Maltepe University in Istanbul.

We hope that, ICMS 2019 will be one of the most beneficial scientific events, bringing together mathematicians from all over the world, and demonstrating the vital role that mathematics play in any field of science.

Welcome to our conference, Maltepe University, İstanbul!

Hüseyin Çakalh
Chairman of the Organizing Committee
2. COMMITTEES

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3. SESSIONS

The lectures in the following parallel sessions are to be held after the plenary speakers lectures:

1. "Topology" organized by Ljubisa D. R. Kocinac,
2. "Analysis and Functional Analysis" organized by Ibrahim Canak,
3. "Sequences, Series, Summability" organized by Hacer Sengul,
4. "Fixed Point Theory" organized by Duran Turkoglu,
5. "Numerical Functional Analysis" organized by Allaberen Ashyralyev,
6. "Computer Science and Technology" organized by Sahin Uyaver,
8. "Recent themes on Controllability and Stability of PDE's" organized by Valeria Neves Domingos Cavalcanti, and Marcelo Moreira Cavalcanti,
10. "Geometry, and Mathematical Education" organized by İlhan Gul.
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Önder Şahinaslan, Maltepe University, Turkey
Fuat Usta, Düzce University, Istanbul, Turkey
Özkan Değer, Istanbul University, Istanbul, Turkey
Posterior Analysis of Weighted Erlang Distribution

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Erlang distribution is continuous probability distribution that has application in several fields such as stochastic process and mathematical biology, due to its relation with exponential and gamma distribution. In the sense that, the duration of the successive calls follows the Erlang distribution, if individual telephone calls is exponentially distributed to the time period. In this study, Bayesian estimation is employed in the estimation of scale parameter of weighted Erlang distribution. The posterior distribution is derived under two informative priors, which are inverse exponential and inverse chi square prior. The Bayes estimated and their relative posterior risks are derived under the assumption of squared error loss function, and precautionary loss function. A Monte Carlo simulation is carried out in order to obtain the numerical value of the estimates. It was observed that squared error loss function performs best when inverse exponential prior is used.

Keywords: Erlang distribution, Bayesian estimation, loss function.

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References


