

# 國立中山大學應用數學系

## 學術演講

講者：宮本道子教授、伊藤宗平教授、武富奈菜美教授  
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講題：

### (1) Shrinkage Estimation for the Rate Parameter Under the Exponential Distribution With Censored Survival Data (Nanami Taketomi 武富奈菜美教授)

#### Abstract

The exponential distribution is widely applied in survival and reliability analyses. To estimate the rate parameter of the exponential distribution with censored survival data, maximum likelihood estimation is usually employed. However, in case the number of events or subjects is small for the data, the maximum likelihood estimator can have large bias and variance. In this talk, we present a shrinkage estimator for the rate parameter of the exponential distribution using a penalized loglikelihood by adding a penalty for a large parameter value. We also present theoretical properties of the penalized maximum likelihood estimator. Simulation results show that the proposed method provides a smaller mean squared error than the maximum likelihood estimation. Finally, we apply the proposed method to the practical data.

### (2) Introduction of School of Information and Data Sciences at Nagasaki University, Japan (Sohei Ito 伊藤宗平教授)

#### Abstract

In this talk, we will give a brief introduction to the geography and history of Nagasaki City, an overview of education and research at Nagasaki University, and a description of the organizational structure of the School of Information and Data Sciences at Nagasaki University.

### (3) Introduction of Global Seminar B (Michiko Miyamoto 宮本道子 教授)

#### Abstract

Nagasaki University has been actively promoting collaborations with universities overseas. As part of the initiative, School of Information and Data Sciences offers Global Seminar B, a class in which the students visit the partner universities abroad and work on various projects in English. In this talk, we will provide a brief introduction to the history and structure of Global Seminar B, and share the experiences gained through the program.

時間：2026/03/19 (Thursday) 14:10 ~ 15:00

地點：理 SC4009-1 教室

茶會：13:30

敬請公告！歡迎參加！

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