

広島統計談話会  
Hiroshima Statistics Study Group

第 286 回談話会を下記のように開催致しますので  
御参集下さいますようご案内申し上げます。

You are cordially invited to the 286<sup>th</sup> meeting as scheduled below.

日 時 : 2014 年 10 月 31 日 (金) 15:00 –  
Date : October 31st, 2014 (Fri) 15:00 –  
場 所 : 放射線影響研究所 講堂  
Place : RERF Auditorium  
演 者 : 藤越 康祝 博士 (広島大学統計科学研究拠点 広島大学名誉教授)  
Speaker : Yasunori Fujikoshi, Ph.D.  
Emeritus Professor of Hiroshima University  
Advisor of the Hiroshima University Statistical Science Research Core  
演 題 : 「多変量線形モデルにおける平均パラメータ行列のランクの推定法と  
高次元一致性」  
Title : “Estimation methods of the rank of a mean parameter matrix in multivariate linear  
model and their high-dimensional consistency properties”

要 約 :

**Summary:**

This talk is concerned with the problem of estimating the rank of a mean parameter matrix in multivariate linear model. First we note that the problem involves some important problems as a special case. For example, it involves the problem of estimating the number of meaningful discriminant functions in discriminant analysis. Further, it is related to reduced-rank regression in multivariate linear regression analysis. As one of our main results we show consistency properties of some estimation criteria based on model selection method under a high-dimensional framework. We also review some other methods in high-dimensional case.