広島統計談話会

Hiroshima Statistics Study Group

第244回談話会を下記に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 244th meeting as scheduled below.

日 時: 2008年12月5日(金)15:00-

Date : Dec 5, 2008 (Fri) 15:00 -

場 所: 放射線影響研究所 講堂

Place: RERF Auditorium

演者: 永井勇氏

(広島大学大学院理学研究科博士課程学生)

Speaker: Mr. Isamu Nagai, B.E.

Department of Mathematics,

Graduate School of Science, Hiroshima University

演 題: 「多変量一般化リッジ回帰モデルにおけるリッジパラメータの選択法」

Title: Optimizations of Ridge Parameters for Multivariate Generalized

Ridge

要 約: Abstract:

A generalized ridge (GR) regression for an univariate linear model was proposed by Hoerl and Kennard (1970). In this talk, we consider GR regression for a multivariate linear model, which named a multivariate GR (MGR) regression. Many authors gave noniterative GR estimators by using optimal ridge parameters. By expanding their optimizations of ridge parameters to multiple response case, we derive noniterative MGR estimators. Especially, by assuming multivariate normality to response variables, an unbiased Mallows' C_L criterion for selecting ridge parameters in MGR regression is proposed. We compare with derived MGR estimators by conducting numerical studies.