広島統計談話会

Hiroshima Statistics Study Group

第 278 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 278th meeting as scheduled below.

日　時：	2013 年 6 月 28 日（金）15:00 –
Date　：	June 28th, 2013 (Fri) 15:00 –
場　所：	放射線影響研究所　講堂
Place　：	RERF Auditorium
演　者：	若木 宏文 博士　（広島大学大学院 理学研究科 教授）
Speaker　：	Hirofumi Wakaki, Ph.D. Professor, Department of Mathematics Graduate School of Science, Hiroshima University
演　題：	「多変量線形回帰モデルの説明変数選択に関する AIC の一致性（説明変数の個数が多い場合）」
Title　：	"A consistency property of the AIC for multivariate linear models when the dimension, the sample size and the number of explanation variables become large"

要　約：

Summary:

It is common knowledge that the Akaike's information criterion (AIC) is not a consistent model selection criterion. This inconsistency property has been confirmed from an asymptotic selection probability evaluated from a large-sample asymptotic framework. However, when a highdimensional asymptotic framework, such that the dimension of the response variables and the sample size are approaching 1, is used for evaluating the selection probability, we can prove a consistency property of the AIC for selecting variables in multivariate linear models. This means that the probability of selecting the true model by the AIC goes to 1 as the sample size and the dimension simultaneously approach 1. In this talk we give a sufficient condition for the consistency when the sample size, the dimension and the number of the explanation variables become large.