広島統計談話会

Hiroshima Statistics Study Group

第 252 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 252nd meeting as scheduled below.

日　時 : 2009 年 12 月 4 日（金）15:00 –
Date : December 4, 2009 (Fri) 15:00 –

場　所 : 放射線影響研究所　講堂
Place : RERF Auditorium

演　者 : 加藤 賢悟 (広島大学大学院理学研究科数学専攻助教)
Speaker : Kengo Kato, Ph.D.
Assistant Professor, Department of Mathematics, Graduate School of Science, Hiroshima University

演　題 : 「分位点回帰における漸近共分散行列の推定について」
Title : “On estimation of the asymptotic covariance matrix in quantile regression”

要　約 :
Abstract :

Since the seminal work of Koenker and Bassett [Regression quantiles, Econometrica 46 (1978) 33-50], quantile regression has been used in many research areas. The main obstacle in conducting statistical inference using quantile regression lies in the fact that the asymptotic covariance matrix of the quantile regression estimator contains the con- ditional density of the error term. In this talk, we first review quantile regression and several estimation methods of the asymptotic covariance matrix. We then show asymptotic normality of Powell's kernel estimator of the asymptotic covariance matrix and derive the optimal bandwidth that minimizes the approximate mean squared error of the kernel estimator.