

広島統計談話会

Hiroshima Statistics Study Group

第 267 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 267th meeting as scheduled below.

日 時 : 2011 年 11 月 4 日 (金) 15:00 –
Date : November 4th, 2011 (Fri) 15:00 –
場 所 : 放射線影響研究所 比治山ホール
Place : RERF Hijiyama Hall
演 者 : 二宮 嘉行 博士 (九州大学 マス・フォア・インダストリ研究所)
Speaker : Yoshiyuki Ninomiya, Ph.D.
Institute of Mathematics for Industry, Kyushu University

演 題 : 「検定間の相関が高い多重検定問題に対する p 値評価について」
Title : “A p-value evaluation for multiple testing problem based on highly correlated test statistics”

要 約 :

Summary:

In various fields including genetics and epidemiology, we sometimes encounter a large number of highly correlated test statistics. The most famous conservative bound for multiple comparison is Bonferroni's bound, but it is not suitable when the test statistics are highly correlated. After providing examples of QTL detection and spatial cluster detection, we propose a new conservative bound, which is easily calculated without multiple integration and is a reasonable approximation even if the test statistics are highly correlated. The performance of the proposed method is evaluated by simulation and real data analysis.