



# 國立高雄大學統計學研究所 巨量資料研究中心 聯合演講

## Sparse Matrix Estimation Based on Greedy Algorithms and Information Criteria

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時間 | 2024年5月15日(星期三)下午3:30-4:30

地點 | 統計所多媒體教室(理學院 320室)

茶會 | 下午3:00 於統計所辦公室(理學院 325室)

### 摘要

We consider the problem of estimating the covariance matrix of serially correlated vectors whose dimension is allowed to be much larger than the sample size. We propose using the orthogonal greedy algorithm (OGA) together with a high-dimensional Akaike's information criterion (HDAIC) to estimate the matrix, and show that the proposed estimate is rate optimal under a sparsity condition more flexible than those in the existing literature. When the covariance matrix is bandable, we introduce a banding/tapering estimate whose parameters are chosen by a novel information criterion. The rate optimality of the latter estimate is also established.

近期演講內容: <https://statsite.nuk.edu.tw/>

高大交通資訊: <https://statsite.nuk.edu.tw/p/412-1037-5044.php?Lang=zh-tw>



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