

The University of Chicago Department of Statistics

Seminar Series

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Group Variable Selection via Hierarchical Lasso and Its Oracle Property

MONDAY, April 21, 2008 at 4:00 PM 133 Eckhart Hall, 5734 S. University Avenue

Refreshments following the seminar in Eckhart 110.

ABSTRACT

In many engineering and scientific applications, predictor variables are grouped, for example, in biological applications where assayed genes or proteins can be grouped by biological role. Common statistical analysis methods such as ANOVA, factor analysis, and functional modeling with partially ordered basis sets also exhibit natural variable groupings. We develop a new variable selection method that respects the group constraint. Our new method enjoys benefits that existing successful methods do not have, while offering the potential for achieving theoretical "oracle" properties.

Please send email to Mathias Drton (drton@galton.uchicago.edu) for further information. Information about building access for persons with disabilities may be obtained in advance by calling Jewanna Carver at 773.834-5169 or by email (carver@galton.uchicago.edu).