



The University of Chicago
Department of Statistics
SUMMER Seminar Series

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**Structured Sparsity, Proximal Optimization and
Multi-Task Learning**

MONDAY, June 27, 2011, at 4:00 PM

110 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

In recent years, there has been increasing interest in problems exhibiting structured sparsity, and methods such as Lasso and Group Lasso have been used extensively to this end. I will discuss a more general framework for structured sparsity which can replace ad hoc approaches. It provides a straightforward way of favoring prescribed sparsity patterns, such as orderings, contiguous regions and overlapping groups, among others. I will also present a first-order optimization method for solving nonsmooth convex programs like these. This method builds on fixed point and successive approximations theory. Finally, I will discuss an approach for multitask learning and matrix completion and a related algorithm.

For further information and about building access for persons with disabilities, please contact Laura Rigazzi at 773.702.8333 or send email (lrigazzi@galton.uchicago.edu). If you wish to subscribe to our email list, please visit the following website: <https://lists.uchicago.edu/web/arc/statseminars>.