

Department of Applied Mathematics and Statistics
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SEMINAR

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October 20, 2005
304 Whitehead Hall
Refreshments: 3:30 p.m.
Seminar: 4:00p.m.

CAN WE *REALLY* LEARN DEFORMABLE MODELS?

ABSTRACT

The link between Bayesian and variational approaches in image processing is common knowledge, in particular in the context of deformable models. However, true generative models and consistent estimation procedures are usually not available, and the mainstream approach is the computation of statistics, mainly based on PCA analysis. We will talk about a recent study, done with S. Allasonnière and Y. Amit, showing that—thanks to a careful statistical modeling of deformable structures—we can derive an effective and consistent estimation algorithm for the various parameters (geometric and photometric) appearing in the model.