

**IEEE Workshop on
Statistical and Computational Theories of Vision**
— Modeling, Learning, Computing, and Sampling

Fort Collins, Colorado, June 22, 1999

(Selected papers will be published in special issue(s) of the Int'l Journal of Computer Vision)

Final Program

7:55AM Workshop Opening.

8:00AM-10:00AM Session 1.

(session chair: Song-Chun Zhu)

- *Invariant Statistics and coding of Natural Micro-images*
— Donald Geman and Alexey Koloydenko
- *An occlusion model generating scale-invariant images*
— Ann Lee and David Mumford
- *Texture representation and synthesis using correlation of complex wavelet coefficient magnitudes*
— Javier Portilla and Eero Simoncelli
- *Meaningful Alignments*
— A. Desolneux, L. Moisan and J. M. Morel

10:00AM-10:15AM Coffee Break.

10:15AM-12:15PM Session 2.

(session chair: Daniel Kersten)

- *Markov networks for low level vision*
— Bill Freeman and Egon Pasztor
- *An equivalence Theorem for mixed Markov fields*
— Artur Fridman
- *Graded learning for object detection*
— Francois Fleuret and Donald Geman
- *Learning behavior manifold for recognition and synthesis*
— Matthew Brand

12:15PM-1:30PM Lunch Break.

—→ continue on the back

1:30PM-3:30PM Session 3.

(session chair: Donald Geman)

- *Visual Search: fundamental bounds, order parameters, and phase transition*
— Alan. Yuille and James Caughlan
- *Image Ensemble Equivalence and Fundamental Bounds*
— Y. N. Wu, S. C. Zhu, and X. W. Liu
- *The statistics of visual correspondence: insights into the visual system*
— Cornelia Fermuller, Robert Pless and Yiannis Aloimonos
- *Statistical structure and task dependence in visual cue integration*
— Paul Schrater and Daniel Kersten

3:30PM-3:45PM Coffee Break.

3:45PM-5:15PM Session 4.

(session chair: Alan Yuille)

- *Gradient-Based learning for object detection, segmentation and recognition*
— Yann LeCun, Patrick Haffner, Leon Bottou, and Yoshua Bengio
- *The joy of sampling*
— David Forsyth, S. Loffe, and J. Haddon
- *Group actions, homomorphism, and matching: a general framework*
— M. Miller and L Younes,

5:15-5:30PM Discussion and Pictures

7:00PM Group Dinner at a Restaurant

Workshop proceedings is published on web:

<http://www.cis.ohio-state.edu/~szhu/SCTV99.html>