

Workshop Schedule

Saturday, April 20, 2002

8:00 *Registration & Continental Breakfast*

8:45 *Introductory Remarks*

Vasilis Z. Marmarelis
University of Southern California

9:00 Signal Processing by the Gerbil Cochlea: What We Can See in Wiener Kernels

Edwin R. Lewis
University of California, Berkeley

9:20 Searching for Connections in a Mammalian Sensory Pathway
by Nonlinear Analysis of Spike Trains

Andrew S. French
Dalhousie University, Halifax

9:40 Pharmacodynamic Analysis of Erythropoietin

Peter Veng-Pedersen
University of Iowa

10:00 *Break*

10:15 Separation of Spiky Transient Activity in EEG/MEG Data
Using Multiresolution and Morphological Analysis

Robert J. Scwabassi
University of Pittsburgh

10:35 Population Coding in Hippocampal Neurons: The Necessity of Transfer
Functions for Correct Short-Term Memory Performance

Robert E. Hampson
Wake Forest University

10:55 Parametric and Nonparametric Models of Presynaptic Nonlinearities
of Hippocampal Pyramidal Neurons

Theodore W. Berger
University of Southern California

11:15 *Break*

11:30 Detection and Control of Epileptic Seizures Using Artificial Neural Networks

Berj L. Bardakjian
University of Toronto

11:50 Localizing Brain Activity in Space and Time: Combining VEP and fMRI

Stanley A. Klein
University of California, Berkeley

12:10 A Bayesian Framework for Sensory Adaptation

Norberto M. Grzywacz
University of Southern California

12:30 *Lunch*

2:30 Independent or Correlated Convergent Presynaptic Trains
Embody Poisson or Cluster Point Processes

Jose P. Segundo
University of California, Los Angeles

2:50 Nonlinear Modeling and Identification of Reflex Contributions to Joint Stiffness

Robert E. Kearney
McGill University

3:10 Separable Least Squares: A New Approach to the Identification
of Nonlinear Block Structured Models

David T. Westwick
University of Calgary

3:30 *Break*

3:45 Synthesizing Response Sequences from the Kernel Series of Multi-Input Systems

Erich E. Sutter
Smith-Kettlewell Eye Research Institute

4:05 Applications of Parallel-Cascade System Identification

Edward D. Lipson
Syracuse University

4:25 Multi-Variate Nonlinear Dynamic Modeling of Closed-Loop Physiological Systems

Vasilis Z. Marmarelis
University of Southern California

4:45 *Discussion*

6:00 *Reception*