

ADVANCED SHORT COURSE/WORKSHOP

on

ADVANCED METHODS OF PHYSIOLOGICAL SYSTEM MODELING

September 18-20, 1986

PACIFIC SHORE HOTEL, CALIFORNIA ROOM  
1819 OCEAN AVENUE  
SANTA MONICA, CALIFORNIA

organized by the

BIOMEDICAL SIMULATIONS RESOURCE  
UNIVERSITY OF SOUTHERN CALIFORNIA

under the sponsorship of the  
BIOMEDICAL RESEARCH TECHNOLOGY PROGRAM  
DIVISION OF RESEARCH RESOURCES  
NATIONAL INSTITUTES OF HEALTH

Chairman and organizer:  
Vasilis Z. Marmarelis  
Director of the Biomedical  
Simulation Resource

Day 3

September 20, 1986

9:00	Auditory Evoked Potentials to Noise and Noise Modulated Sounds	Aage Moller Univ. of Pittsburgh
9:30	Measurements of Electrical Impedance in the Cochlea: Implications for the Design of Cochlear Implants	Francis Spelman Univ. of Washington
10:00	On Lateral Inhibition, Adaptation and Kernel Analysis	Robert Pinter Univ. of Washington
10:30	Dynamics of Cat X and Y Retinal Ganglion Cells, and Some Related Issues in Nonlinear Analysis	Jonathan Victor Cornell Univ. Medical College
11:00	Nonlinear Systems Analysis of Synaptic Transmission in the Mammalian Hippocampus	Theodore Berger Univ. of Pittsburgh
11:30	Nonlinear Properties of the Somatosensory System	Robert Sclabassi Univ. of Pittsburgh
12:00	Lunch	
1:00	Biological Phenomena: the Fractal Approach	Hun Sun Drexel University
1:30	Identification of Systems with Hysteresis	George Bekey Univ. of Southern Calif.
2:00	Are Expert Systems Models for Human Thought Processes?	Terry Bahill Univ. of Arizona
2:30	Functional Expansions, Parallel Cascades and Nonlinear Difference Equations	Michael Korenberg Queen's University
3:00	Physiological Interpretation of Kernels	L. Stark and W. Krenz Univ. of Calif., Berkeley
3:30	Ternary Stimuli for Measuring Important Higher Order Kernels	Stanley Klein Univ. of Houston
4:00	A Practical Nonstochastic Approach to Nonlinear Time-Domain Analysis	Eric Sutter Smith-Kettwell Inst.
4:30	A Nonlinear Model of Muscle Fiber Mechanics	Ian Hunter McGill University
5:00	A Motor Control Model Through Three Domains	Lloyd Partridge Univ. of Tennessee
5:30	Open Discussion on: "Nonlinear System Modeling in Physiology: State of the Art and Agenda for the Future."	
6:30	Closing Remarks	Vasilis Marmarelis