1973 SEMINARS IN SIMULATION, OPTIMIZATION AND CONTROL

No.	Date	Speaker	Subject
1	May 2	P. Nolan (McMaster)	Application of modern control and optimization theory to power systems
2	May 9	J.W. Bandler C.M. Crowe J.S. Kirkaldy M. Levinson (McMaster)	Panel discussion on "How to do research"
3	May 16	M. Bayley (McMaster)	Efficiency in programming
4	May 23	J.S. Kirkaldy (McMaster)	The minimax principle of irreversible thermodynamics
5	May 30	A. Sen (McMaster)	Some results on on-line system identification
6 7	Jun 1	J.W. Bandler (McMaster)	(1) A microwave network optimization program (2) New algorithms for minimax optimization
8	Jun 1	W. Kinsner (McMaster)	Acceleration of convergence of the finite-element method
9	Jun 6	E.J. Davison (Toronto)	The generalized servomechanism problem
10	Jun 13	M.J. Best (Waterloo)	Conjugate direction algorithms to solve linearly constrained minimization problems
11	Jun 20	J.R. Popovic (McMaster)	Development of network optimization package
12	Jun 27	J.F. MacGregor (McMaster)	Discrete stochastic control
13	Jul 4	S. Mukherjee (McMaster)	Computational methods in optimal control
14	Jul 11	B. Bardakjian (McMaster)	Optimality conditions for recursive digital filters
15	Jul 18	N.K. Sinha (McMaster)	Application of stochastic approximation to adaptive control

16	Jul 25	T. Prasad (Waterloo)	Martingales and their application to optimum filtering and estimation
17	Aug 1	J.H.K. Chen (McMaster)	Application of discrete optimization
18	Aug 8	C.M. Crowe (McMaster)	Techniques for accelerating the convergence of iterative computations
19	Aug 15	J.F. Pinel (Bell-Northern, Ottawa)	Tolerance assignment in linear networks
20	Aug 15	K.A. Roberts (Bell-Northern, Ottawa)	Applications of linear programming techniques to circuit design problems
21	Aug 22	W.Y. Chu (McMaster)	Nonlinear programming package for constrained optimization version FLNLP1
22	Aug 29	J.D. Wright (McMaster)	Computer control of a chemical reactor: some problems
23	Nov 7	S.H. Chisholm (McMaster)	Semiconductor device modelling for general purpose electronic network simulation programs
24	Nov 14	F.H. Branin, Jr. (Waterloo)	Widely convergent method for finding multiple solutions of simultaneous nonlinear equations
25	Nov 28	S.H. Chisholm (McMaster)	General purpose electrical network simulation programs
26	Dec 5	N.K. Sinha (McMaster)	Estimation and control in a fuzzy environment
27	Dec 12	E. Della Torre (McMaster)	Minicomputer architecture: PDP 11/45 and Nova 2 Introduction
28	Dec 19	E. Della Torre (McMaster)	Minicomputer architecture: PDP 11/45 and Nova 2 Relocatability, re-entrancy and arithmetic

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No.	Date	Speaker	Subject
1	Jan 9	W. Kinsner (McMaster)	PDP 11/45 software
2	Jan 16	J.D. Wright (McMaster)	Nova software
3	Jan 23	E. Della Torre (McMaster)	Peripherals for minicomputers
4	Jan 30	W. Kinsner (McMaster)	Development of a program for analyzing the cutting of bubbles on the PDP 11/45
5	Feb 6	H. deBruin (McMaster)	Storage scope display and A/D interfacing for the PDP 11/45
6	Feb 12	M.T. Wasan (Queen's)	First passage time process of Brownian motion with positive draft
7	Feb 13	W. Kinsner (McMaster)	How to use the Calcomp plotter
8	Feb 20	W. Kinsner (McMaster)	A new ultrafast A/D conversion technique
9	Feb 25	J. Bayne (Ontario Hydro)	Power system representation
10	Mar 1	C. Charalambous (Waterloo)	Nonlinear least pth optimization and nonlinear programming
11	Mar 15	C. Charalambous (Waterloo)	Some recent results in minimax approximation and application to digital filters
12	Mar 20	J. Vlach (Waterloo)	Absolutely stable, one-step, explicit, arbitrary order integration method for the numerical solution of time responses of networks
13	May 30	F. Gruyaert (McMaster)	On the optimization of distributed parameter systems with boundary control: a counter example for the maximum principle
14	Jun 26	N.K. Sinha (McMaster)	Modelling an educational system

15	Jun 28	J.M. Undrill (Power Technologies, Schenectady)	Power system control problems
16	Jul 3	J.H. Anderson (Waterloo)	Applications of modern control theory to power systems
17	Jul 10	F.H. Branin, Jr. (Waterloo)	A unifying approach to the classical methods of formulating network equations
18	Jul 10	F.H. Branin, Jr. (Waterloo)	Network sensitivity and noise analysis simplified
19	Jul 15	M.M. Gupta (Saskatchewan)	Dynamic sensitivity
20	Jul 17	P. Rozsa (Budapest)	Decoupling and pole placement in multivariable systems
21	Jul 18	N.K. Sinha (McMaster)	Canonical form minimal realizations of multivariable systems
22	Jul 22	M.M. Gupta (Saskatchewan)	Lyapunov design for adaptive systems
23	Jul 24	A. Jutan (McMaster)	The dynamic behaviour of a non-adiabatic packed bed catalytic reactor
24	Jul 25	N.K. Sinha (McMaster)	Adaptive Kalman filtering
25	Jul 29	M.M. Gupta (Saskatchewan)	Identification of time-varying systems
26	Jul 31	J.F. MacGregor (McMaster)	Stochastic control studies in continuous stirred-tank reactor
27	Aug 7	J.W. Bandler (McMaster)	Some new ideas and results on the optimal tolerancing and tuning problem in design
28	Aug 14	M.M. Gupta (Saskatchewan)	Measurements and information processing of physiological signals (1st of a series)
29	Aug 21	J.F. MacGregor (McMaster)	Parameter estimation in closed-loop systems

30	Aug 28	J.F. Pinel K.A. Roberts K. Singhal (Bell-Northern, Ottawa)	The impact of design centering and tolerance assignment on network design
31	Sep 4	P.C. Liu (McMaster)	Some implications of biquadratic functions in the tolerance problem
32	Sep 11	D.G. Lainiotis (SUNY, Buffalo)	Partitioning approach to estimation and control
33	Sep 18	J.W. Bandler (McMaster)	Worst case network tolerance optimization
34	Sep 25	H.M. Zein El-Din (McMaster)	Multimachine dynamic stability calculations
35	Oct 2	W. Kinsner (McMaster)	Coherent optical processor using magnetic bubbles
36	Oct 30	W. Kinsner (McMaster)	Ultrafast analog-to-digital conversion method
37	Dec 18	O. Einarsson (NRC, Ottawa)	Lagrangean methods in nonlinear programming

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No.	Date	Speaker	Subject
1	Feb 19	W. Kinsner (McMaster)	Care algebra in transportation problems
2	Mar 26	M.R.M. Rizk (McMaster)	LU factorization and sparse matrix methods in circuit design
3	Mar 26	N.K. Sinha (McMaster)	Recent advances in adaptive control
4	Apr 10	E. Della Torre W. Kinsner (McMaster)	(1) Chanel-bar bubble propagating circuit (2) Acoustic bubble detector
5	Apr 16	B. Kuszta (Warsaw)	Optimal state estimation in distributed-parameter systems
6	Apr 30	J.W. Bandler (McMaster)	Practical design centering, tolerancing and tuning
7	May 7	J.W. Bandler (McMaster)	The least pth approach to engineering design
8	May 28	H. Tromp (McMaster)	Recent advances in optimal tolerancing and tuning of micro-wave circuits
9	May 28	J.W. Bandler (McMaster)	Integrated approach to circuit design: optimal centering, tolerancing, tuning, model uncertainties, mismatched terminations and parasitic effects
10	Jun 11	W.Y. Chu (McMaster)	FLOPT3 - an interactive program for least pth optimization with extrapolation to minimax solutions
11	Jun 11	P.B. Johns (Manitoba)	The TLM method of numerical analysis
12	Jun 11	C. Charalambous (Waterloo)	A method to overcome the ill-conditioning problem of differentiable penalty functions
13	Jun 18	N.K. Sinha (McMaster) B. Kuszta (Warsaw)	Design of optimum signal input for system identification

14	Jun 25	C. Charalambous (Waterloo)	Newton type algorithms for non-linear programming
15	Jun 30	S.P. Bingulac (Belgrade)	Minimal realization and identi-fication of multivariable systems
16	Jul 9	A.R. Conn (Waterloo)	An efficient method to solve the minimax problem directly
17	Jul 23	M. Vidyasagar (Concordia)	Recent results in minimax optimization
18	Jul 30	R. Dembo (McMaster)	Introduction to geometric pro-gramming
19	Aug 6	R. Dembo (McMaster)	Sensitivity analysis in geometric programming
20	Aug 20	M.H. Mickle (Pittsburgh)	Dynamic modelling of socio-economic systems
21	Sep 10	A. Bagchi (Delft)	Strongly consistent estimates of parameters in continuous time series
22	Sep 12	T. Kailath (Stanford)	New results in fast algorithms for least-square estimation and related problems
23	Sep 17	J. Hickin (McMaster)	Projective methods for reducing linear systems and applications to control and estimation
24	Sep 26	F. Csaki (Budapest)	Transformation methods from phase-variable form to canonical forms
25	Sep 30	D.P. Atherton (New Brunswick)	Nonlinear control systems
26	Oct 22	G.W.E. Nieuwhof (AECL, Mississauga)	An introduction to fault tree analysis with emphasis on failure rate evaluation
27	Nov 12	N.K. Sinha (McMaster)	the application of fuzzy control to industrial processes
28	Nov 19	W. Kinsner (McMaster)	New developments in magnetic bubbles: technology applications and theory
29	Dec 3	I. Gustavsson (Sweden)	Recursive Estimation Methods

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No.	Date	Speaker	Subject
1	May 13	R. Rutman (Tel Aviv)	Matrix polynomial equations and their role in the design of multivariable systems
2	Jul 26 Jul 27	P.B. Johns (Nottingham)	An introduction to numerical analysis using transmission-line modelling (six hours)
3	Aug 6	W. Kinsner (McMaster)	Finite difference methods with nonuniform lattices
4	Oct 1	T.L. Sandor (Budapest)	Three dimensional graphics for vector field displaying
5	Oct 8	M.B. Carver (AECL, Chalk River)	Towards a unified framework for automated solution of partial differential equations
6	Oct 22	D. Graupe (Colorado State)	Functional separation of EMG signals via ARMA identification methods for prosthesis control purposes
7	Nov 10	R.A. Kay (AECL, Mississauga)	Optimization of CANDU reactors
8	Nov 10	H.L. Abdel-Malek (McMaster)	How to use available engineering simulation programs efficiently for optimal assignment of parameter tolerances and yield estimation
9	Dec 8	Y. Shamash (Tel Aviv)	Analytical methods of reducing linear systems