ROBOTS, MANIPULATORS AND VEHICLES

Robust Automatic Steering Using Fuzzy Modelling and LMI Control
S. MAMMAR

Experimental Modeling of a Two-Link Flexible Manipulator
B. RIEGE, M.A. ARTEAGA

Vibration Control of Flexible Robots - Theoretical and Experimental Results
W. BERNZEN

APPLICATIONS I

The CRONE Suspension: Concept and Technological Solutions
X. MOREAU, A. OUSTALOUP, M. NOUILLANT

Semi-Physical Identification of a Winding Process
T. BASTOGNE, C. DEFRANOUX, A. RICHARD

Attitude Control of a Satellite - Low-Order $H_\infty$ Synthesis Using a Cone Complementarity Linearisation Algorithm
C. VALENTIN-CHARBONNEL, G. DUC, S. Le BALLOIS

TIME-DELAY SYSTEMS I

Tuning of a Modified Smith Predictor
F. LEONARD

On the Input-Output Linearization for Nonlinear Time-Delay Systems
L.A. MÁRQUEZ-MARTÍNEZ, C.H. MOOG

Disturbance Decoupling for Time-Delay Nonlinear Systems: Dynamic Approach
M. VELASCO-VILLA, C.H. MOOG

MAX-PLUS LINEAR SYSTEMS I

Minimal Realizations and State Space Transformations in the Symmetrized Max-Algebra
R. de VRIES, B. De SCHUTTER, B. De MOOR

Identification of Linear Systems Using MA and ARMA Model in Dioid
F. GALLOT, J.L. BOIMOND, L. HARDOUIN

Optimal Control of Discrete Event Systems in Case of Updated Reference Input
E. MENGUY, J.L. BOIMOND, J.L. HARDOUIN

PLENARY PAPER V

From Sioux City to the X-33
E.A. JONCKHEERE

APPLICATIONS II

A Sliding Mode Controller for Induction Motors Based on Passivity Feedback Equivalence
D. TAOUTAOU, A. GLUMINEAU, R. CASTRO-LINARES

Variable-Structure Control with Fuzzy Plant Model
A. SALA, P. ALBERTOS

Designing Robust Controllers with Operating Point Tracking
A. TROFINO NETO, A.S. BAZANELLA, A. FISCHMAN
Robust Servo Control of High Speed Optical Pickups
S. Lim, T.Y. Jung

TIME-DELAY SYSTEMS II

Generalized Popov Theory Applied to State-Delayed Systems
V. Ionescu, S.-I. Niculescu, J.-M. Dion, L. Dugard, H. Li

Delay-Dependent Robust Stabilization of Uncertain Time-Delay Systems
Y.S. Moon, P.G. Park, W.H. Kwon

On One Game Problem of Control with Variable Information Time Lag
G.Ts. Chikrii

Robust $H_\infty$ Control Problem for Delayed Linear Systems with Parameter Uncertainties
G. Lu, Y. Zheng, B.M. Chen

Self-Tuning Controller Based on Laguerre Function for Time-Delay Systems
J. Hejdiš, L. Juráčková, Š. Kozák

Fuzzy Gain Control for the Control Action of a Time Delay Processes
N. Bizon, E. Sofron, F. Radu

MAX-PLUS ALGEBRA, THEORY AND APPLICATIONS

On Large Scale Max-Plus Algebra Models in Railway Systems
G.J. Olsder, Subiono

Regular Sequences and Admission Control in Stochastic $(\text{Max,+})$ Systems
E. Altman, B. Gaujal, A. Hordijk

On the Length of the Periods of Non-Expansive Mappings
G.J. Olsder, S. Perennes

Numerical Computation of Spectral Elements in Max-Plus Algebra
J. Cochet-Terrasson, G. Cohen, S. Gaubert, M. McGettrick, J.-P. Quadrat

Duality in the Max-Algebra
E. Wagneur

Evolutions Determined by Control Problems and Hamilton-Jacoby-Bellman Equations
S.N. Samborski

PLENARY PAPER VI

Feedback System Design-Synthesize or Guess
P. Dorato

STRUCTURE BASED ALGORITHMS FOR THE ANALYSIS AND SYNTHESIS OF LINEAR CONTROL SYSTEMS

A Structure Based Synthesis Method for Disturbance Rejection
J.-F. Camart, B. Del-Muro-CueLLar, M. Malabre

Combining Disturbance Decoupling with Disturbance Attenuation
J.C. Martínez-Garcia

Synthesis of Nonregular Control Laws
S. Mondié, J.J. Loiseau

Simultaneous Decoupling and Disturbance Rejection for Systems Modelled by Bond Graph
A. Rahman, G. Dauphin-Tanguy
The Generic Row Degrees in a Row Proper Form of a Structured Polynomial Matrix
J.W. van der WOUDE

Generic Structure at Infinity of Structured Time-Delay Systems
O. SENAME, V. HOVELAQUE, C. COMMAULT, J.M. DION

STRUCTURE AND CONTROL OF NONLINEAR SYSTEMS

Lowering the Orders of Input Shifts in Discrete-Time Generalized State-Space Systems
U. KOTTA

Input-Output Decoupling of Nonlinear Systems by Output Feedback
R. POTHIN, C.H. MOOG

Transformation of Nonlinear Systems into State Affine Control Systems and Observer Synthesis
V. LÓPEZ, J. de LEÓN MORALES, A. GLUMINEAU

On the Input-Output Linearization of Non-Linear Systems
E. DELALEAU, M. FLIESS, P.S. PEREIRA da SILVA

Invariant Properties of an Interactor for Nonlinear Multivariable Systems
Y. MUTOH

Control of Oscillations in Affine Nonlinear Systems
A.S. SHIRIAEV

CONTROL OF CHEMICAL AND BIOLOGICAL REACTORS

Qualitative Dynamics of a Class of Nonlinear Biological Systems
O. BERNARD, J.-L. GOUZÉ

From Open-Loop Trajectories to Stabilizing State Feedback - Application to a CSTR
N. MARCHAND, M. ALAMIR

A Reduced Order Model and a Robust Controller’s Synthesis of a Black-Liquor Evaporation System
A.L. CARDOSO, A. DOURADO

Control of Distributed Parameter Systems as Lumped Input and Distributed Output Systems
G. HULKO, C. BELAVY, J. BELANSKY, A. HEUGEROVÁ, M. LAVRÍNC

Expert Control of a Biotechnological Process, Modeled as a Variable Structure System
S. CARAMAN, E. CEANGA, S. BUMBARU

Author Index