



automatica

A Journal of **IFAC** the International
Federation of Automatic Control

Volume 36 Number 4

April 2000

CONTENTS

		REGULAR PAPERS
C. Kambhampati, J.D. Mason and K. Warwick	485	A stable one-step-ahead predictive control of non-linear systems
D. Bauer and M. Jansson	497	Analysis of the asymptotic properties of the MOESP type of subspace algorithms
J. Lu and R.E. Skelton	511	Robust variance control for systems with finite-signal-to-noise uncertainty
Y. Lu and Y. Arkun	527	Quasi-Min-Max MPC algorithms for LPV systems
C. Edwards, S.K. Spurgeon and R.J. Patton	541	Sliding mode observers for fault detection and isolation
		BRIEF PAPERS
B. Marinescu and H. Bourlès	555	Robust state-predictive control with separation property: A reduced-state design for control systems with non-equal time delays
G. H. C. Oliveira, W.C. Amaral, G. Favier and G.A. Dumont	563	Constrained robust predictive controller for uncertain processes modeled by orthonormal series functions
A. Polański	573	On absolute stability analysis by polyhedral Lyapunov functions
A. Sideris and A. Tchernychev	579	Multiplier-based robust H_∞ design with time-varying uncertainties
B. d'Andréa-Novel and J.M. Coron	587	Exponential stabilization of an overhead crane with flexible cable via a back-stepping approach
M. Krstić and H.-H. Wang	595	Stability of extremum seeking feedback for general nonlinear dynamic systems
H. Yoon, B.H. Tongue and A.K. Packard	603	Q domain optimization method for l_1 -optimal controllers
		TECHNICAL COMMUNIQUE
J. Leyva-Ramos and A.E. Pearson	613	Output feedback stabilizing controller for time-delay systems
M. Waller and H. Saxén	619	Estimating the degree of time variance in a parametric model
M.S. Mahmoud	627	Robust H_∞ control of discrete systems with uncertain parameters and unknown delays
		BOOK REVIEWS
S. Battilotti	637	<i>Nonlinear Dynamical Systems</i> , 2nd Edition by P.A. Cook
T. Glad	638	<i>Dynamic Programming and Optimal Control, Part I</i> by D.P. Bertsekas
H. Zwart	639	<i>Smart material structure</i> by H.T. Banks, R.C. Smith and Y. Wang

Ref: C 2 PF 251199/03 Df: 27745104
AUTOMATICA (JOURNAL OF IFAC)
01.04.00 Vol. 36 No. 4
0005-1098 22101144 14.06.00
LIBRIS
144 BOULEVARD KRIM BELKACEM
ALGER
ALGERIE

INDEXED/ABSTRACTED IN: *Appl. Mech. Rev.*, *Curr. Cont. ASCA*, *Aqua. Abstr.*, *Cam. Sci. Abstr.*, *Curr. Cont. CompuMath.*, *Curr. Cont./Eng. Tech. & Applied Sci.*, *Comput. Cont.*, *Eng. Ind.*, *INSPEC Data.*, *Info. Sci. Abstr.*, *Math. R.*, *Oper. Res. Manage. Sci.*, *PASCAL-CNRS Data.*, *Curr. Cont. Sci. Cit. Ind.*, *Curr. Cont. SCISEARCH Data.*, *SSSA/CISA/ECA/ISMEC*, *Zentralblatt für Mathematik*