

Cornell Library Annex Interlibrary Loan

From: Olin Interlibrary Services <olin-ils-lending@cornell.edu>
Sent: Monday, December 22, 2014 1:29 PM
To: Cornell Library Annex Interlibrary Loan
Subject: ILL Request TN1164424 RUSH

__number of scans/.pdf document posted on server N>B>: Let us know before copying if there is no Date Received Stamp for this volume. thanks

COPY REQUEST - TN: 1164424 RUSH

Please send the following volume OR scan of the cited article to:
INTERLIBRARY SERVICES, OLIN LIBRARY

Location: Library Annex
CALL NUMBER: TK3001.A1 A43 RUSH

JOURNAL or MONOGRAPH TITLE: Proceedings: annual Allerton Conference on Communication, Control, and Computing
RUSH

VOL/ISSUE/DATE/PGS: 37 1999 Title page, TOC, and DATE RECEIVED STAMP

ARTICLE: Title page, TOC, and DATE STAMP of 1999 edition (37th year)

ILL number: 02109 D Patron:
Requesting Library:
Wilmer Cutler Pickering Hale & Dorr
Attn: Wendi Hoffenberg , Library
60 State St.
Boston, MA 02109

Odyssey:

Request type: Unaffiliated \$80

NOTICE: THIS MATERIAL MAY BE PROTECTED BY COPYRIGHT LAW (TITLE 17 U.S. CODE) This copy has been provided from the collections of the Cornell University Library in conformance with U.S. copyright law. It is to become the property of the requestor, and is only to be used for personal study, scholarship, or research. Any other use may require the permission of the copyright owner. It is the responsibility of the person requesting this item to make an independent legal assessment of any proposed use and to secure any necessary permissions.

If you are unable to fill this request, please check one of the reasons below:

- In use
- In process
- Lost
- Non-circulating

PROCEEDINGS

THIRTY-SEVENTH ANNUAL ALLERTON CONFERENCE
ON COMMUNICATION, CONTROL, AND COMPUTING



Bruce Hajek
R.S. Sreenivas
Conference Co-Chairs



Conference held
September 22, September 23, and September 24, 1999
Allerton House
Monticello, Illinois

Sponsored by
The Coordinated Science Laboratory
and
The Department of Electrical and Computer Engineering
of the
UNIVERSITY OF ILLINOIS
at
Urbana-Champaign

TABLE OF CONTENTS

FORWARD..... *i*

I-A: STOCHASTIC NETWORKS I
 Organizers: S.P. Meyn and R. Srikant
 (University of Illinois at Urbana-Champaign)
 Chair: S.P. Meyn
 (University of Illinois at Urbana-Champaign)

REPRESENTATION AND EXPANSION OF (MAX, PLUS) LYAPUNOV EXPONENTS 1
 F. Baccelli, S. Gaubert, and D. Hong

MARTINGALE PROBLEMS AND LINEAR PROGRAMS FOR SINGULAR CONTROL 11
 T.G. Kurtz and R.H. Stockbridge

STATIONARY REFLECTED LÉVY PROCESSES IN STOCHASTIC NETWORKS 21
 T. Konstantopoulos and G. Last

ON THE IMPACT OF VARIABILITY ON THE BUFFER DYNAMICS IN IP NETWORKS 30
 Y. Joo, V. Ribeiro, A. Feldmann, A.C. Gilbert, and W. Willinger

QUEUEING NETWORKS WITH INTERACTING SERVICE RESOURCES 42
 M. Armony and N. Bambos

I-B: CODING THEORY I: DECODING AND CHANNELS
 Organizers: R. Koetter and R.E. Blahut
 (University of Illinois at Urbana-Champaign)
 Chair: A. Vardy
 (University of California, San Diego)

A NEW UPPER BOUND ON THE RELIABILITY FUNCTION OF THE GAUSSIAN CHANNEL 52
 A. Ashikhmin, A. Barg, and S. Litsyn

RECURSIVE DECODING OF REED-MULLER CODES..... 61
 I. Dumer

LOSSLESS COMPRESSION IN CONSTRAINED CODING..... 70
 J.L. Fan, B. Marcus, and R. Roth

I-C: HYBRID/DISCRETE-EVENT-DYNAMIC SYSTEMS
 Chair: R.S. Sreenivas
 (University of Illinois at Urbana-Champaign)

MODELLING OF TIMED DISCRETE EVENT SYSTEMS 75
 R.S. Minhas and W.M. Wonham

INTERACTING DISCRETE EVENT SYSTEMS 85
 S. Abdelwahed and W.M. Wonham

STABILITY ANALYSIS FOR INTERCONNECTED HYBRID SYSTEMS..... 93
 S. Yamamoto and T. Ushio

DECENTRALIZED SUPERVISORY CONTROL OF CONCURRENT DISCRETE EVENT SYSTEMS WITH PARTIAL OBSERVATIONS	103
S. Jiang and R. Kumar	
A NEW PROBABILISTIC APPROACH TO CONGESTION CONTROL IN COMMUNICATION NETWORKS.....	113
H. Mortazavian and J. Mirkovic	
A BIGRAPH MATCHING THEOREM.....	124
S. Ayyorgun and R.L. Cruz	
I-D: ACTIVE NETWORKS	
Organizer/Chair: Y. Shavitt (Bell Labs, Lucent Technologies)	
CHUNKS IN PLAN: LANGUAGE SUPPORT FOR PROGRAMS AS PACKETS.....	127
J.T. Moore, M. Hicks, and S. Nettles	
ON THE INTERFACE OF PROGRAMMABLE NETWORK ELEMENTS	137
G. Hjálmtýsson	
BOWMAN AND CANES: IMPLEMENTATION OF AN ACTIVE NETWORK	147
S. Merugu, S. Bhattacharjee, Y. Chae, M. Sanders, K. Calvert, and E. Zegura	
DESIGN OF A FLEXIBLE OPEN PLATFORM FOR HIGH PERFORMANCE ACTIVE NETWORKS.....	157
S. Choi, D. Decasper, J. Dehart, R. Keller, J. Lockwood, J. Turner, and T. Wolf	
IMPLEMENTING A CONCAST SERVICE.....	166
K. Calvert, J. Griffioen, B. Mullins, A. Sehgal, and S. Wen	
ACTIVE DISTRIBUTED MANAGEMENT FOR IP NETWORKS.....	176
R. Kawamura and R. Stadler	
I-F: SPACE-TIME METHODS FOR COMMUNICATION	
Chair: D. Sarwate (University of Illinois at Urbana-Champaign)	
NEW APPROACH FOR SPACE-TIME TRANSMITTER/RECEIVER DESIGN	186
H. El Gamal and A.R. Hammons, Jr.	
INTERFERENCE SUPPRESSION FOR CDMA VIA A SPACE-TIME POWER MINIMIZATION BASED PREPROCESSOR WITH APPLICATIONS TO GPS.....	196
W.L. Myrick, M.D. Zoltowski, and J.S. Goldstein	
SOFT-WEIGHTED TRANSMIT DIVERSITY FOR WCDMA.....	204
A. Hottinen, R. Wichman, and D. Rajan	
MULTIUSER DETECTION TECHNIQUES FOR COMBINED ARRAY PROCESSING AND SPACE-TIME BLOCK CODING.....	214
B. Lu and X. Wang	
A TRANSMIT ADAPTIVE ANTENNA SCHEME WITH FEEDBACK FOR WIRELESS COMMUNICATIONS.....	216
Y. Le Pézenec, F. Boixadera, Y. Farmine, and N. Whinnett	

II-A: CODING THEORY II: ITERATIVE DECODING AND TURBO CODES

Organizers: R. Koetter and R.E. Blahut
(University of Illinois at Urbana-Champaign)
Chair: R. Koetter
(University of Illinois at Urbana-Champaign)

CONCENTRATE 221
T. Richardson and R. Urbanke

EFFICIENT ENCODING OF LOW-DENSITY PARITY-CHECK CODES..... 231
T. Richardson and R. Urbanke

IRREGULAR TURBOCODES..... 241
B.J. Frey and D.J.C. MacKay

ON QUASI-CYCLIC REPEAT-ACCUMULATE CODES 249
R.M. Tanner

THE SERIAL CONCATENATION OF RATE-1 CODES THROUGH UNIFORM RANDOM INTERLEAVERS 260
H.D. Pfister and P.H. Siegel

II-B: STOCHASTIC NETWORKS II

Organizers: S.P. Meyn and R. Srikant
(University of Illinois at Urbana-Champaign)
Chair: R. Srikant
(University of Illinois at Urbana-Champaign)

QUEUE LENGTH ASYMPTOTICS FOR MARKOVIAN SERVICE NETWORKS 270
A. Mandelbaum, W.A. Massey, and M.I. Reiman

EXACT ASYMPTOTICS FOR 1-LIMITED EXPONENTIAL POLLING MODELS 280
W. Chang, D.G. Down, and R.D. Foley

INVARIANT RATE FUNCTIONS FOR DISCRETE TIME QUEUES 288
A.J. Ganesh, N. O'Connell, and B. Prabhakar

LARGE DEVIATIONS AND OPTIMALITY OF THE LARGEST WEIGHTED DELAY
FIRST DISCIPLINE 297
A.L. Stolyar and K. Ramanan

ON ESTIMATING BUFFER OVERFLOW PROBABILITIES UNDER
MARKOV-MODULATED INPUTS..... 306
I.Ch. Paschalidis and S. Vassilaras

INDUCED BURSTINESS IN GENERALIZED PROCESSOR SHARING QUEUES WITH LONG-TAILED
TRAFFIC FLOWS..... 316
S. Borst, O. Boxma, and P. Jelenković

THE ASYMPTOTICS OF SELECTING THE SHORTEST OF TWO, IMPROVED..... 326
M. Mitzenmacher and B. Vöcking

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.