

## Bibliography

1. C. Agnew, Dynamic Modeling and Control of Congestion-prone Systems, *Operations Research* 24, 3 (1976), 400-419.
2. B. D. O. Anderson and J. B. Moore, *Optimal Filtering*, Prentice Hall, 1979.
3. B. D. O. Anderson and J. B. Moore, *Linear Quadratic Methods*, Prentice Hall, 1990.
4. D. Bacon, A. Dupuy, J. Schwartz and Y. Yemini, Nest : A Network Simulation and Prototyping Tool, *USENIX 88*, 1988.
5. J. J. Bae and T. Suda, Survey of Traffic Control Protocols in ATM Networks, *Proc. Globecom 1990*, December 1990, 300.1.1-300.1.6.
6. K. Bharath-Kumar and J. M. Jaffe, A New Approach to Performance-Oriented Flow Control, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 427-435.
7. M. Boiteux, Peak Load Pricing, *Journal of Business* 33 (April 1960), 157-179.
8. J. Bolot, Dynamical Behavior of Rate-Based Flow Control Mechanisms, Comp. Sci.-Tech. Rpt. 2279.1, University of Maryland, October 1989.
9. A. D. Bovopoulos and A. A. Lazar, Decentralized Algorithms for Optimal Flow Control, *Proc. 25th Allerton Conference on Communications Control and Computing*, October 1987. University of Illinois, Urbana-Champaign.
10. A. D. Bovopoulos and A. A. Lazar, Asynchronous Algorithms for Optimal Flow Control of BCMP Networks, Tech. Rpt. WUCS-89-10, Washington University, St. Louis, MO, February 1989.
11. R. Brown, Calendar Queues: A Fast  $O(1)$  Priority Queue Implementation for the Simulation Event Set Problem, *Communications of the ACM* 31, 10 (October 1988), 1220-1227.
12. R. Caceres, P. B. Danzig, S. Jamin and D. J. Mitzel, Characteristics of Application Conversations in TCP/IP Wide-Area Internetworks, *Proc. ACM SigComm 1991*,

September 1991.

13. R. Caceres,, Measurements of Wide Area Internet Traffic, Comp. Sci. Dept. Tech. Rpt. 89/550 , University of California, Berkeley, December 1989.
14. D. Cheriton, Sirpent: A High-Performance Internetworking Approach, *Proc. ACM SigComm 1989*, September 1989, 158-169.
15. D. Chiu and R. Jain, Analysis of Increase and Decrease Algorithms for Congestion Avoidance in Computer Networks, *Computer Networks and ISDN Systems 17* (1989), 1-14.
16. I. Cidon and I. Gopal, Paris: An Approach to Integrated High-Speed Private Networks, *International Journal of Digital and Analog Cabled Systems 1* (1988), 77-85.
17. D. D. Clark, M. L. Lambert and L. Zhang, NETBLT: A Bulk Data Transfer Protocol, RFC-998, Network Working Group, March 1987.
18. D. D. Clark, V. Jacobson, J. Romkey and H. Salwen, An Analysis of TCP Processing, *IEEE Communications Magazine*, June 1989, 23-29.
19. D. D. Clark, Policy Routing in Internetworks, *Journal of Internetworking Research and Experience*, September 1990, 35-52.
20. R. Cocchi, D. Estrin, S. Shenker and L. Zhang, A Study of Priority Pricing in Multiple Service Class Networks, *Proc. ACM SigComm 1991*, September 1991.
21. D. Comer, in *Internetworking with TCP/IP Principles, Protocols and Architecture*, Prentice Hall, Englewood Cliffs, NJ, 1988.
22. D. W. Davies, The Control of Congestion in Packet Switching Networks, *IEEE Trans. Communications 20* (June 1972), 546-550.
23. A. Demers, S. Keshav and S. Shenker, Analysis and Simulation of a Fair Queueing Algorithm, *Journal of Internetworking Research and Experience*, September 1990, 3-26;. also Proc. ACM SigComm, Sept. 1989, pp 1-12..

24. B. T. Doshi and S. Dravida, Congestion Control for Bursty Data in High Speed Wide Area Packet Networks: In-Call Parameter Negotiations, Preprint, AT&T Bell Laboratories, Crawfords Corner Road, Holmdel NJ 07733, March 1991.
25. C. Douligeris and R. Mazumdar, An Approach to Flow Control in an Integrated Environment, CU-CTR-Tech. Rpt.-50, Columbia University, 1987.
26. C. Douligeris and R. Mazumdar, On Pareto Optimal Flow Control in a Multiclass Environment, *Proc. 25th Allerton Conference, University of Illinois*, October, 1987.
27. C. Douligeris and R. Majumdar, User Optimal Flow Control in an Integrated Environment, *Proc. of the Indo-US Workshop on Systems and Signals*, January 1988. Bangalore, India.
28. A. Dupuy, J. Schwartz, Y. Yemini and D. Bacon, NEST: A Network Simulation and Prototyping Testbed, *Communications of the ACM* 33, 10 (October 1990), 63-74.
29. A. A. Economides, P. A. Ioannou and J. A. Silvester, Adaptive Routing and Congestion Control for Window Flow Controlled Virtual Circuit Networks, *Proc. 27th Allerton Conference on Communications, Control and Computing University of Illinois* (1989).
30. A. E. Ekberg, D. T. Luan and D. M. Lucantoni, Bandwidth Management: A Congestion Control Strategy for Broadband Packet Networks: Characterizing the Throughput-Burstiness Filter, *Proc. ITC Specialist Seminar, Adelaide*, 1989, paper no. 4.4.
31. D. Estrin, Policy Requirements for Inter Administrative-Domain Routing, Request for Comments 1125, Network Working Group, November 1989 .
32. D. F. Ferguson, The Application of Microeconomics to the Design of Resource Allocation and Control Algorithms, *PhD thesis*, Columbia University, 1989.
33. D. Ferrari, in *Computer Systems Performance Evaluation*, Prentice Hall, Englewood Cliffs, NJ, 1978.

34. D. Ferrari and D. Verma, Buffer Space Allocation for Real-Time Channels in a Packet-Switching Network, International Comp. Sci. Institute Tech. Rpt. 90-022, Berkeley, June 1990.
35. D. Ferrari, Client Requirements for Real-Time Communications Services, *IEEE Communications Magazine* 28, 11 (November 1990).
36. D. Ferrari and D. Verma, Quality of Service in ATM Networks, International Comp. Sci. Institute Tech. Rpt. 90-064, Berkeley, November 1990.
37. D. Ferrari and D. Verma, A Scheme for Real-Time Channel Establishment in Wide-Area Networks, *IEEE J. on Selected Areas in Communications*, April 1990.
38. J. Filipiak, *Modelling and Control of Dynamic Flows in Communication Networks*, Springer-Verlag, 1988.
39. S. Floyd and V. Jacobson, Traffic Phase Effects in Packet-Switched Gateways, *Computer Communications Review* 21, 2 (April 1991).
40. S. Floyd and V. Jacobson, On Traffic Phase Effects in Packet-Switched Gateways, Preprint, April 1991.
41. A. G. Fraser, Towards a Universal Data Transport System, *IEEE Journal on Selected Areas in Communication SAC-1*, 5 (Nov. 1983), 803-816.
42. A. Fraser and S. Morgan, Queueing and Framing Disciplines for a Mixture of Data Traffic Types, *AT&T Bell Laboratories Technical Journal* 63, 6 (1984), 1061-1087.
43. E. Gafni and D. Bertsekas, Dynamic Control of Session Input Rates in Communication Networks, *IEEE Trans. on Automatic Control* 29, 11 (1984), 1009-1016.
44. M. Gerla and L. Kleinrock, Flow Control : A Comparative Survey, *IEEE Trans. on Communication COM-28*, 4 (April 1980), 553-574.
45. A. Giessler, A. Jagemann, E. Maser and J. D. Hanle, Flow Control Based on Buffer Classes, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 436-443.

46. S. J. Golestani, Congestion-Free Transmission of Real-Time Traffic in Packet Networks, *Proc. Infocom 1990*, June 1990, 527-536.
47. S. J. Golestani, A Stop-and-Go Queueing Framework for Congestion Management, *Proc. ACM SigComm 1990*, September 1990, 8-18.
48. S. J. Golestani, Duration-limited Statistical Multiplexing of Delay-Sensitive Traffic in Packet Networks, *Proc. Infocom 1991*, April 1990.
49. G. C. Goodwin and K. S. Sin, *Adaptive Filtering Prediction and Control*, Prentice Hall, 1984.
50. A. Greenberg and N. Madras, How Fair is Fair Queueing?, *Proc. Performance 90*, 1990.
51. R. Gusella, A Measurement Study of Diskless Workstation Traffic on an Ethernet, *IEEE Trans. on Communications*, September 1990.
52. R. Gusella, Characterizing the Variability of Arrival Processes with Indices of Dispersion, *IEEE J-SAC* 9, 2 (February 1991), 203-211.
53. Z. Haas, Performance of the Adaptive Admission Congestion Control Scheme, Preprint, AT&T Bell Laboratories, Crawfords Corner Road, Holmdel NJ 07733, March 1991.
54. E. L. Hahne, C. R. Kalmanek and S. P. Morgan, Fairness and Congestion Control on a Large ATM Data Network with Dynamically Adjustable Windows, *13th International Teletraffic Congress*, Copenhagen, June 1991.
55. E. L. Hahne, Round Robin Scheduling for Fair Flow Control in Data Communication Networks, LIDS-TH-1631, Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, Cambridge, MA 02139.
56. E. Hashem, Analysis of Random Drop for Gateway Congestion Control, LCS-Tech. Rpt. 465, Laboratory for Computer Science, Massachusetts Institute of Technology, Cambridge, MA, 1989.

57. A. T. Heybey and J. R. Davin, A Simulation Study of Fair Queueing, *Computer Communications Review* 20, 5 (October 1990), 23-29.
58. E. Horowitz and S. Sahni, *Fundamentals of Data Structures*, Prentice Hall, 1981.
59. M. Hsiao and A. A. Lazar, A Game Theoretic Approach to Decentralized Flow Control of Markovian Queueing Networks, *Proc. Performance '87*, Brussels, Belgium, December 1987, 55-73.
60. M. Hsiao and A. A. Lazar, Optimal Flow Control of Multi-Class Queueing Networks with Partial Information, *IEEE Transactions on Automatic Control* 35, 7 (July 1990), 855-860.
61. M. Irland, Simulation of CIGALE 1974, *Proc. ACM-IEEE 4th Data Commcn. Symp.*, P.Q., Canada, Oct. 1975.
62. M. I. Irland, Buffer Management in a Packet Switch, *IEEE Trans. on Communication COM- 26* (March 1978), 328-337.
63. V. Jacobson, Congestion Avoidance and Control, *Proc. ACM SigComm*, August 1988, 314-329.
64. R. Jain and K. K. Ramakrishnan, Congestion Avoidance in Computer Networks with a Connectionless Network Layer : Concepts, Goals and Methodology, *Proc. IEEE 1988 Computer Communication Conference*, August, 1988.
65. R. Jain, A Comparison of Hashing Schemes for Address Lookup in Computer Networks, Tech. Rpt.-593, Digital Equipment Corporation, February 1989.
66. R. Jain, A Delay-based Approach for Congestion Avoidance in Interconnected Heterogeneous Computer Networks, *Computer Communications Review*, October 1989, 56-71.
67. R. Jain, Myths About Congestion Management in High-Speed Networks, Technical Report-726, Digital Equipment Corporation, October 1990.

68. C. R. Kalmanek, H. Kanakia and S. Keshav, Rate Controlled Servers for Very High Speed Networks, *Proc. Globecom 1990*, December 1990, 300.3.1-300.3.9.
69. C. R. Kalmanek, Xunet 2: A Nationwide Testbed in High-Speed Networking, *Comp. Sci. Tech. Rpt.*, March 1991, AT&T Bell Labs, 600 Mountain Ave. Murray Hill, NJ 07974.
70. F. Kamoun, A Drop and Throttle Flow Control Policy for Computer Networks, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 444-452.
71. P. Karn and C. Partridge, Improving Round-Trip Time Estimates in Reliable Transport Protocols, *Proc. ACM SigComm* , 1987, 2-7.
72. M. G. H. Katavenis, Fast Switching and Fair Control of Congested Flow in Broadband Networks, *IEEE JSAC SAC-5*, 8 (October 1987).
73. S. Keshav, REAL : A Network Simulator, Comp. Sci. Dept. Tech. Rpt. 88/472 , University of California, Berkeley, December 1988.
74. S. Keshav, REAL Manuals, Comp. Sci. Dept. Tech. Rpt. 89/530 , University of California, Berkeley, September 1989.
75. S. Keshav, The Packet Pair Flow Control Protocol, Tech. Rpt. 91-028, International Comp. Sci. Institute , Berkeley, CA 94704, May 1991.
76. S. Keshav and P. S. Khedkar, Fuzzy Prediction, Preprint, Comp. Sci. Division, Dept. of EECS, Univ. California, Berkeley, CA 94720., April 1991.
77. S. Kheradpir, PARS: A Predictive Access-Control and Routing Strategy for Real-Time Control of Telecommunication Networks, Unpublished GTE Report, GTE Laboratories Inc., 40 Sylvan Road, Waltham, MA 02254, 1988.
78. D. Knuth, Fundamental Algorithms, *Addison-Wesley*, 1973.
79. K. Ko, P. P. Mishra and S. K. Tripathi, Predictive Congestion Control in High-Speed Wide-Area Networks, in *Protocols for High Speed Networks II*, Elsevier Science Publishers/North-Holland, April 1991.

80. J. Laffont, Massachusetts Institute of Technology Press, Cambridge, 1988.
81. S. S. Lam and M. Reiser, Congestion Control of Store and Forward Networks by Buffer Input Limits, *Proc. Nat. Telecommncn. Conf.*, Los Angeles, CA, Dec 1977.
82. G. Langari, Analysis and Design of Fuzzy Control Systems, *PhD thesis (in preparation)*, University of California, Berkeley, 1991.
83. A. A. Lazar, A. T. Temple and R. Gidron, MAGNET II: A Metropolitan Area Network Based on Asynchronous Time Sharing, *IEEE Journal on Selected Areas in Communications* 8, 8 (October 1990).
84. B. Leiner, Critical Issues in High Bandwidth Networking, Request for Comments 1077, Network Working Group, November 1988.
85. C. Lemieux, Theory of Flow Control in Shared Networks and Its Application in the Canadian Telephone Network, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 399-413.
86. C. Lo, Performance Analysis and Application of a Two-Priority Packet Queue, *AT&T Technical Journal* 66, 3 (1987), 83-99.
87. D. Luan and D. Lucantoni, Throughput Analysis of an Adaptive Window-based Flow Control Subject to Bandwidth Management, *Proc. 12th International Teletraffic Conference*, 1988, 1062-1068.
88. J. C. Majithia, M. Irland, J. L. Grange, N. Cohen and C. O'Donnell, Experiments in Congestion Control Techniques , *Proc. Int. Symp. Flow Control Computer Networks*, Versailles, France, Feb. 1979, 211-234.
89. A. Mankin and K. K. Ramakrishnan, Performance and Congestion Control Working Group Report, *Internet Engineering Task Force Meeting*, July 1989.
90. A. Mankin, Random Drop Congestion Control, *Proc. ACM SigComm 1990*, September 1990.



91. J. Matsumoto and H. Mori, Flow Control in Packet-Switched Networks by Gradual Restrictions of Virtual Calls, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 466-473.
92. N. F. Maxemchuck, Dispersity Routing in Store and Forward Networks, *PhD thesis*, University of Pennsylvania, May 1975.
93. P. E. McKenney, Stochastic Fairness Queueing, *Proc. INFOCOM '90*, June 1990.
94. D. Mills and W. Braun, The NSFNET backbone Network, *Proc. ACM SigComm 1987*, 1987, 191-196.
95. D. Mills, The Fuzzball, *Proc. ACM SigComm 1988*, 1988, 115-122.
96. D. Mitra and J. B. Seery, Dynamic Adaptive Windows for High Speed Data Networks: Theory and Simulations, *Proc. ACM SigComm 1990*, September 1990, 30-40.
97. D. Mitra, Asymptotically Optimal Design of Congestion Control for High Speed Data Networks, *To Appear in IEEE Trans. on Communications*, 1991.
98. S. P. Morgan, Queueing Disciplines and Passive Congestion Control in Byte-Stream Networks, *Proc. IEEE INFOCOM '89*, 1989, 711-729.
99. A. Mukherjee and J. C. Strikwerda, Analysis of Dynamic Congestion Control Protocols - A Fokker-Planck Approximation, *Proc. ACM SigComm '91*, September 1991.
100. G. J. Murakami, R. H. Campbell and M. Faiman, Pulsar: Non-Blocking Packet Switching with Shift-register Rings, *Proc. ACM SigComm 1990*, September 1990, 145-155.
101. J. Nagle, On Packet Switches with Infinite Storage, *IEEE Trans. on Communications COM-35* (1987), 435-438.
102. K. Ogata, *Discrete Time Control Systems*, Prentice Hall, 1987.
103. A. K. Pawlikowski, Steady State Simulation of Queueing Processes: A Survey of Problems and Solutions, *ACM Computing Surveys* 22, 2 (June 1990), 123-171.

104. P. F. Pawlita, Traffic Measurements in Data Networks, Recent Measurement Results, and Some Implications, *IEEE Trans. on Communications* 29, 4 (April 1981).
105. V. Paxson, Measurements and Models of Wide Area TCP Conversations, LBL-30840, Lawrence Berkeley Laboratory, Berkeley, CA, June 1991.
106. E. Pazner, Pitfalls in the Theory of Fairness, in *Social Goals and Social Organization : Essays in the Memory of Elisha Pazner*, Cambridge University Press, New York, 1985.
107. E. Pazner, Recent Thinking on Economic Justice, in *Social Goals and Social Organization : Essays in the Memory of Elisha Pazner*, Cambridge University Press, New York, 1985.
108. J. Postel, Transmission Control Protocol, RFC 793, USC Information Sciences Institute, 1981.
109. J. Postel, Internet Protocol, Request for Comments 791, Network Working Group, 1981.
110. L. Pouzin, Methods, Tools and Observations on Flow Control in Packet-Switched Data Networks, *IEEE Trans. on Communication COM-29*, 4 (April 1981), 413-426.
111. I. Pressman, A Mathematical Formulation of the Peak Load Pricing Problem, *Bell Journal of Economics and Management Science* 1 (Autumn 1970), 304-326.
112. W. Prue and J. Postel, Something a Host Could Do with Source Quench : The Source QUench Introduced Delay (SQUID), Request for Comments 1016, Network Working Group, July 1987.
113. W. Prue and J. Postel, A Queueing Algorithm to Provide Type-of-Service for IP Links, Request for Comments 1046, Network Working Group, 1988.
114. K. K. Ramakrishnan, Analysis of a Dynamic Window Congestion Control Protocol in Heterogenous Environments Including Satellite Links, *Proc. 1986 IEEE Symp. on Computer Networks*, 1986.

115. K. K. Ramakrishnan, D. Chiu and R. Jain, Congestion avoidance in Computer Networks with a Connectionless Network Layer - Part IV - A Selective Binary Feedback Scheme for General Topologies, Technical Report-510, Digital Equipment Corporation, November 1987.
116. K. K. Ramakrishnan and R. Jain, Congestion avoidance in Computer Networks with a Connectionless Network Layer - Part II - An Explicit Binary Feedback Scheme, Technical Report-508, Digital Equipment Corporation, April 1987.
117. K. K. Ramakrishnan and R. Jain, A Binary Feedback Scheme for Congestion Avoidance in Computer Networks, *ACM Trans. on Comp. Sys.* 8, 2 (May 1990), 158-181.
118. P. V. Rangan, Trust Relationships, Naming, and Secure Communication in Large Distributed Computer Systems, Comp. Sci. Dept. Tech. Rpt. 88/456 , University of California, Berkeley, October 1988.
119. T. G. Robertazzi and A. A. Lazar, On the Modeling and Optimal Flow Control of the Jacksonian Network, *Performance Evaluation* 5 (1985), 29-43.
120. K. K. Sabnani and A. N. Netravali, A High Speed Transport Protocol for Datagram/Virtual Circuit Networks, *Proc. ACM SigComm 1989*, September 1989, 146-157.
121. B. A. Sanders, A Public Good/Private Good Decomposition for Optimal Flow Control of an M/M/1 Queue, *IEEE Trans. on Automatic Control* 30, 11 (November 1985), 1143-1145.
122. B. A. Sanders, An Asynchronous, Distributed Flow Control Algorithm for Rate Allocation in Computer Networks, *IEEE Trans. on Computers* 37, 7 (July 1988).
123. B. A. Sanders, An Incentive Compatible Flow Control Algorithm for Rate Allocation in Computer Networks , *IEEE Trans. on Computers* 37, 9 (September 1988).
124. S. Shenker, Comments on the IETF Performance and Congestion Control Working

- Group Draft on Gateway Congestion Control Policies, Unpublished, 1989.
125. S. Shenker, Making Greed Work in Networks: A Game-Theoretic Analysis of Gateway Service Disciplines, Preprint, Xerox PARC, 3333 Coyote Hill Road, Palo Alto, CA 94304., September 1989.
  126. S. Shenker, A Theoretical Analysis of Feedback Flow Control, *Proc. ACM SigComm 1990*, September 1990, 156-165.
  127. S. Shenker, L. Zhang and D. D. Clark, Some Observations on the Dynamics of a Congestion Control Scheme, *Computer Communications Review* 20, 5 (October 1990), 30-39.
  128. M. Sidi, W. Liu, I. Cidon and I. Gopal, Congestion Control Through Input Rate Regulation, *Proc. Globecom 89*, December 1989, 1764-1768.
  129. S. Singh, A. K. Agrawala and S. Keshav, Deterministic Analysis of Flow and Congestion Control Policies in Virtual Circuits, Tech. Rpt.-2490, University of Maryland, June 1990.
  130. P. O. Steiner, Peak Loads and Efficient Pricing, *Quarterly Journal of Economics* 71 (November 1957), 585-610.
  131. S. Tan, An Architecture for Call Processing, Internal Choices Report, Dept. of Comp. Sci., University of Illinois at Urbana-Champaign, November 1990.
  132. A. S. Tanenbaum, in *Computer Networks*, Prentice Hall, Englewood Cliffs, NJ, 1981.
  133. D. Tipper and M. K. Sundareshan, Numerical Methods for Modeling Computer Networks under Nonstationary Conditions, *JSAC* 8, 9 (December 1990).
  134. C. Topolcic, editor. Experimental Internet Stream Protocol, Version 2 (ST-II), RFC-1190, Network Working Group, October 1990.
  135. S. Tripathi and A. Duda, Time-dependent Analysis of Queueing Systems, *INFOR* 24, 3 (1978), 334-346.

136. J. Turner, New Directions in Communications (or Which Way to the Information Age?), *IEEE Communication Magazine* 24, 10 (October 1986).
137. F. Vakil and A. A. Lazar, Flow Control Protocols for Integrated Networks with Partially Observed Traffic, *IEEE Transactions on Automatic Control* 32, 1 (1987), 2-14.
138. F. Vakil, M. Hsiao and A. A. Lazar, Flow Control in Integrated Local Area Networks, *Performance Evaluation* 7, 1 (1987), 43-57.
139. H. R. Varian, Equity, Envy, and Efficiency, *J. Econ. Theory* 9 (1974), 63-91.
140. H. Varian, in *Microeconomic Analysis*, W.W. Norton and Company, 1978.
141. D. Verma, Guaranteed Performance Communication in High-Speed Networks, *PhD thesis*, University of California, December 1991.
142. D. Verma, H. Zhang and D. Ferrari, Delay Jitter Control for Real-Time Communication in a Packet Switching Network, *Proc. TriComm '91*, April 1991.
143. J. G. Waclawsky and A. K. Agrawala, Transfer Time and Queue Dynamics of Window Protocols, *Comp. Sci.-Tech. Rpt.-2321*, University of Maryland, September 1989.
144. J. G. Waclawsky and A. K. Agrawala, Dynamic Behavior of Data Flow within Virtual Circuits, *Comp. Sci.-Tech. Rpt.-2250*, University of Maryland, May 1989.
145. J. G. Waclawsky, Window Dynamics, *PhD Thesis*, University of Maryland, College Park, May 1990.
146. C. A. Waldspurger, T. Hogg, B. A. Huberman, J. O. Kephart and S. Stornetta, SPAWN: A Distributed Computational Economy, *SSL-89-18*, Xerox PARC, Palo Alto, CA, November 1990.
147. Z. Wang and J. Crowcroft, A New Congestion Control Scheme: Slow Start and Search, Preprint, University College, London, UK, October 1990.
148. C. L. Williamson and D. R. Cheriton, Loss-Load Curves: Support for Rate-Based Congestion Control in High-Speed Datagram Networks, *Proc. ACM SigComm 1991*,

September 1991.

149. J. W. Wong, J. P. Sauve and J. A. Field, A Study of Fairness in Packet-Switching Networks, *IEEE Trans. on Communication COM-30*, 2 (Feb., 1982), 346-353.
150. Internet Transport Protocols, XSI 028112, Xerox Corporation.
151. L. A. Zadeh, Fuzzy Sets, *Journal of Information and Control* 8 (1965), 338-353.
152. L. A. Zadeh, Outline of a New Approach to the Analysis of Complex Systems and Decision Processes, *IEEE Trans. on Systems, Man and Cybernetics*, 1973, 28-44.
153. L. Zhang, Why TCP Timers Don't Work Well, *Proc. Sigcomm 1986*, 1986, 397-405.
154. L. Zhang, A New Architecture for Packet Switching Network Protocols, *PhD thesis*, Massachusetts Institute of Technology, July 1989.
155. L. Zhang and D. Estrin, Design Considerations for Usage Accounting, *Computer Communications Review* 20, 5 (October 1990), 56-67.
156. H. Zhang and S. Keshav, Comparison of Rate-Based Service Disciplines, *Proc. ACM SigComm 1991*, September 1991. also International Comp. Sci. Institute Tech. Rpt. 91-024, Berkeley, CA..
157. L. Zhang, S. Shenker and D. D. Clark, Observations on the Dynamics of a Congestion Control Algorithm: The Effects of Two-Way Traffic, *Proc. ACM SigComm 1991*, September 1991.
158. H. J. Zimmerman, in *Fuzzy Set Theory and its Applications*, Kluwer Academic Publishers, 1985.