Science without Laws. By Ronald N. Giere. University of Chicagp Press, Chicago. (1999). 285 pages. $25.00, £17.50.

Contents:

Acknowledgments. Introduction. *The science wars in perspective*. I. Perspectives on science studies. 1. Viewing science. 2. Explaining scientific revolutions. 3. Science and technology studies. II. Perspectives on science. 4. Naturalism and realism 5. Science without laws of nature. 6. The cognitive structure of scientific theories. 7. Visual models and scientific judgment. III. Perspectives on the philosophy of science. Introduction. 8. Philosophy of science naturalized. 9. Constructive realism. 10. The feminism question in the philosophy of science. 11. From *Wissenschaftliche Philosophie* to philosophy of science. Conclusion. *Underdetermination, relativism, and perspectival realism*. Notes. References. Index.

Nonlinear programming and variational inequality problems: A Unified Approach. By Michael Patriksson. Kluwer Academic Publishers, Dordrecht. (1999). 334 pages. $168.00, NLG 280.00, GBP 99.00.

Contents:

Preface. Notation. 1. Introduction. 2. Technical preliminaries. 3. Instances of the cost approximation algorithm. 4. Merit functions for variational inequality problems. 5. Convergence of the CA algorithm for nonlinear programs. 6. Convergence of the CA algorithm for variation inequality problems. 7. Finite identification of active constraints and of solutions. 8. Parallel and sequential decomposition CA algorithms. 9. A column generation/simplicial decompositional algorithm. Appendix. Definitions. References. Index.

High Performance Networking: IFIP TC-6 Eighth International Conference on High Performance Networking (HPN'98) Vienna, Austria, September 21–25, 1998. Edited by Harmen R. van As. Kluwer Academic Publishers, Boston, MA. (1998). 699 pages. $195.00, NLG 440.00, GBP 132.00.

Contents:

Preface. Committees. Reviewers.

1. Broadband internet access. Broadband access to the internet—An overview (H. Leopold (Invited speaker)). Performance of multiple access protocols in geo-stationary satellite systems (H. Koraitim, S. Tohmé, M. Berrada and A. Brajal). A new HFC architecture using return path multiplexing (J.C. Yee).

2. Multimedia multicast. End-to-end reliable multicast transport protocol adaptation for floor control and other conference control functions requirements (N. Kausar and J. Crocroft). An architecture for conference-support using secured multicast (T. Hardjono, N. Doraswamy and B. Cain). SELDOM: A simple and efficient low-cost delay-bounded, online multicasting (T. Alrabiah and T.F. Znati).

3. Scalable multicast. A scalable and robust feedback mechanism for adaptive multimedia multicast systems (A. Youssef, H. Abdel-Wahab and K. Maly). A scalable protocol for reporting periodically using multicast IP (L. Blazević and E. Gauthier). A scalable scheme for the real-time control protocol (R. El-Marakby and D. Hutchison).

4. ATM infrastructure. Enhanced convolution approach for connection admission control in ATM networks (J.L. Marzo, J. Domingo-Pascual, R. Fabregat and J. Solé-Pareta). Fast rerouting in ATM networks: Pro-active search protocol (I. Lievens, T. Cattrysse and P. Demeester). Impact of VC merging on buffer requirements in ATM networks (A.L. Schmid, I. Iliadis and P. Droz). A comparison of ATM stream merging techniques (M. Baldi, D. Bergamasco, S. Gai and D. Malagrinó). Integrating parallel computing applications in an ATM scenario (J. Vila-Sallent and J. Solé-Pareta).

5. Next generation internet. Differentiated services: A new approach for quality of service in the internet (F. Baumgartner, T. Braun, P. Habegger (Invited speaker). Toward a hierarchical mobile Ipv6 (C. Castelluccia). Active libraries (A flexible strategy for active networks (D.C. Lee and S.F. Midkiff).

6. QoS in the internet. End-to-end QoS provisioning through resource adaptation (D.G. Waddington and D. Hutchison). A dynamic sender-initiated reservation protocol for the internet (P.P. White and J. Crowcroft). USD: Scalable bandwidth allocation for the internet (Z. Wang). A connectionless approach to providing QoS in IP networks (B. Nandy, N. Seddigh, A.S.J. Chapman and J. Hadi Salim).

7. IP/ATM internetworks. An implementation of a gateway for hierarchically encoded video across ATM and IP networks (J.-M. Robinet, Y. Au and A. Banerjea). Trading off network utilisation and delays by performing shaping on VC ATM connections carrying LAN traffic (P. Castelli, L. Guida and M. Molina). Packet-based approach to ATM cell policing, and their effects on internet traffic (C. Song, R. Wilder and T. Dwight). Optimising bandwidth reservation in IP/ATM internetworks using the guaranteed delay service (C.A. Malcher Bastos and M.A. Stanton).

8. Internet applications. Orchestra!: An internet services for distributed musical sessions and collaborative music developing and engineering (P. Bussotti and F. Pirri). High-performance online presentation of complex 3D scenes (S. Olbrich and H. Pralle). On the optimal placement of web proxies in the internet: The linear topology (B. Li, X. Deng, M.J. Golin and K. Sohraby). The network computer for an open services market (L. Henckel and J. Kuthan).

9. Internet networking. Integrated services: IP networking applications (G. Howard (Invited speaker). The interaction of the TCP flow control procedure in end nodes on the proposed flow control mechanism for use in IEEE 802.3 switches (J. Wechta, A. Eberlein and F. Halsall). On end-to-end congestion avoidance for TCP/IP (J. Martin and A. Nilsson).

10. Flow and congestion control. A rate based back-pressure flow control for the internet (C.M. Pazos and M. Gerla). TCP-BFA: Buffer fill avoidance (A.A. Awadallah and C. Rai). Motivation of an end-to-end regulation of bandwidth in intranetworks: The ROBIN concept (M. Frank and P. Martini). Nondeterministic classifier performance evaluation for flow based IP switching (J. Karvo and M. Ilvesmäki).

11. QoS routing and scheduling. Internet QoS routing using the Bellman-Ford algorithm (D. Cavendish and M. Gerla). Feedback controlled scheduling for QoS in communication systems (J. Schiller). Scheduling algorithms for advance resource reservation (C. Xu and J.W. Wong). Achieving 90/system (G.S. Kuo and P.-C. Ko). Service logic mobility over intelligent broadband networks (Ch.Z. Patrikakis, S.E. Polykalas and S.S. Venieris).

The Financing of Catastrophe Risk. Edited by Kenneth A. Froot. University of Chicago Press, Chicago. (1999). 477 pages. $68.00, GBP 54.50.
Contents:
Acknowledgments. Introduction (Kenneth A. Froot). 1. Insurer demand for catastrophe reinsurance (Anne Gron). 2. Alternative means of redistributing catastrophic risk in a national risk-management system (Christopher M. Lewis and Kevin C. Murdock). 3. Pricing excess-of-loss reinsurance contracts against catastrophic loss (J. David Cummins, Christopher M. Lewis and Richard D. Phillips). 4. Challenges facing the insurnace industry in managing catastrophic risks (Paul R. Kleindorfer and Howard C. Kunreuther). 5. The pricing of U.S. catastrophe reinsurance (Kenneth A. Froot and Paul G.J. O'Connell). 6. Reinsurance for catastrophes and cataclysms (David M. Cutler and Richard J. Zeckhauser). 7. The influence of income tax rules on insurance reserves (David F. Bradford and Kyle D. Logue). 8. Courting disaster? The transformation of federal disaster policy since 1803 (David A. Moss). 9. The moral hazard of insuring the insurers (James G. Bohn and Brian J. Hall). 10. Index hedge performance: Insurer market penetration and basis risk (John A. Major). 11. Panel discussions. Contributors. Author index. Subject index.

Linguistic Diversity in Space and Time. By Johanna Nichols. University of Chicago Press, Chicago. (1992). 358 pages. $19.00, GBP 15.25.
Contents:
List of illustrations. List of tables. Acknowledgments. Note on transcription and abbreviations. 1. Introduction. 2. Favored and disfavored grammatical patterns. 3. Correlations between types. 4. Correlations of structural types with grammatical categories. 5. Diachronic stability: Genetic and areal. 6. The role of geography: Structural affinities between areas. 7. Linguistic diversity: Geographical distribution. 8. Diversity and linguistic prehistory: Conclusions and open questions. Appendixes. 1. Sample languages. 2. Data: Language (by area) and structural features. 3. Alphabetical list of languages. 4. Frequency and distribution of voice systems. Notes. References. Indexes.