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Titolo	Databases, information systems, and peer-to-peer computing : international workshops, DBISP2P 2005/2006, Trondheim, Norway, August 28-29, 2005, Seoul, Korea, September 11, 2006 : revised selected papers / / Gianluca Moro [and three others] (editors)
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Descrizione fisica	1 online resource (433 p.)
Collana	Information Systems and Applications, incl. Internet/Web, and HCI ; ; 4125
Disciplina	004.65
Soggetti	Peer-to-peer architecture (Computer networks) Management information systems Database management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Third Edition -- Galois Connections, T-CUBES, and P2P Data Mining -- Querying a Super-Peer in a Schema-Based Super-Peer Network -- Query Answering and Overlay Communities -- Database Selection and Result Merging in P2P Web Search -- Multiple Dynamic Overlay Communities and Inter-space Routing -- Benefit and Cost of Query Answering in PDMS -- Indexing, Caching and Replication Techniques -- Cooperative Prefetching Strategies for Mobile Peers in a Broadcast Environment -- Symmetric Replication for Structured Peer-to-Peer Systems -- A Gradient Topology for Master-Slave Replication in Peer-to-Peer Environments -- Complex Query Processing and Routing -- A Content–Addressable Network for Similarity Search in Metric Spaces -- Range Query Optimization Leveraging Peer Heterogeneity in DHT Data Networks -- Guaranteeing Correctness of Lock-Free Range Queries over P2P Data -- Publish/Subscribe with RDF Data over Large Structured Overlay Networks -- Semantic Overlay Networks -- A Semantic Information Retrieval Advertisement and Policy Based System for a P2P Network -- Cumulative Algebraic Signatures for Fast String Search, Protection Against Incidental Viewing and Corruption of Data in

an SDDS -- PARIS: A Peer-to-Peer Architecture for Large-Scale Semantic Data Integration -- Processing Rank-Aware Queries in P2P Systems -- Semantic Caching in Schema-Based P2P-Networks -- Aggregation of a Term Vocabulary for P2P-IR: A DHT Stress Test -- Services, Agents and Communities of Interest -- Peer Group-Based Dependency Management in Service-Oriented Peer-to-Peer Architectures -- LEAP-DB: A Mobile-Agent-Based Distributed DBMS Not Only for PDAs -- Models and Languages for Overlay Networks -- A Peer-to-Peer Membership Notification Service -- Querying Communities of Interest in Peer Database Networks -- Fourth Edition -- Middleware for Reliable Real-Time Sensor Data Management -- Data Placement and Searching -- Oscar: Small-World Overlay for Realistic Key Distributions -- Keyword Searching in Structured Overlays Via Content Distance Addressing -- Semantic Search -- XML Query Routing in Structured P2P Systems -- Reusing Classical Query Rewriting in P2P Databases -- Efficient Searching and Retrieval of Documents in PROSA -- P2P Query Reformulation over Both-As-View Data Transformation Rules -- RDFCube: A P2P-Based Three-Dimensional Index for Structural Joins on Distributed Triple Stores -- Query Processing and Workload Balancing -- Optimal Caching for First-Order Query Load-Balancing in Decentralized Index Structures -- On Triple Dissemination, Forward-Chaining, and Load Balancing in DHT Based RDF Stores -- Priority Based Load Balancing in a Self-interested P2P Network -- A Self-organized P2P Network for an Efficient and Secure Content Location and Download -- Query Coordination for Distributed Data Sharing in P2P Networks -- Continuous Queries and P2P Computing -- A Comparative Study of Pub/Sub Methods in Structured P2P Networks -- Answering Constrained k-NN Queries in Unstructured P2P Systems -- Scalable IPv4/IPv6 Transition: A Peer-to-Peer Based Approach.

Sommario/riassunto

The aim of the International Workshop on Databases, Information Systems and P2P Computing was to explore the promise of P2P to o?er exciting new p- sibilities in distributed information processing and database technologies. The realization of this promise lies fundamentally in the availability of enhanced services such as structured ways for classifying and registering shared infor- tion, veri? cation and certi?cation of information, content distributed schemes and quality of content, security features, information discovery and accessib- ity, interoperation and composition of active information services, and ?nally market-based mechanisms to allow cooperative and noncooperative information exchanges. The P2P paradigm lends itself to constructing large-scale, complex, adaptive, autonomous and heterogeneous database and information systems, endowed with clearly speci?ed and di?erential capabilities to negotiate, bargain, coordinate and self-organize the information exchanges in large-scale networks. This vision will have a radical impact on the structure of complex organizations (business, sci- ti?c or otherwise) and on the emergence and the formation of social communities, and on how the information is organized and processed. The P2P information paradigm naturally encompasses static and wireless connectivity and static and mobile architectures. Wireless connectivity combined with the increasingly small and powerful mobile devices and sensors poses new challenges as well as opp- tunities to the database community. Information becomes ubiquitous, highly distributed and accessible anywhere and at any time over highly dynamic, - stable networks with very severe constraints on the information management and processing capabilities.

2. Record Nr. UNINA9910814426403321

Titolo	40 years of Berezinskii-Kosterlitz-Thouless theory / / editor, Jorge V. Jose, Indiana University, USA
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, 2013 New Jersey : , : World Scientific, , [2013] 2013
ISBN	981-4417-64-5
Descrizione fisica	1 online resource (xii, 351 pages) : illustrations
Collana	Gale eBooks
Classificazione	33.26 33.74
Disciplina	530.41
Soggetti	Condensed matter Solid state physics Nuclear physics Statistical physics
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Introduction and Overview J. V. Jose; References; 1. Early Work on Defect Driven Phase Transitions J. M. Kosterlitz and D. J. Thouless; 1.1. Introduction; 1.2. One-Dimensional Ising Model; 1.3. Vortex Driven Transitions in Superfluid Films; 1.4. Other Systems with Defect-Mediated Transitions; 1.4.1. Two-dimensional magnetic systems; 1.4.2. Isotropic Heisenberg model; 1.4.3. Two-dimensional Coulomb plasma; 1.4.4. Two-dimensional crystals; 1.4.5. Thin film superconductors; 1.5. Scaling Theory; 1.6. Scaling Theory in Analogous Systems 1.6.1. Duality and the roughening of crystal facets1.6.2. Substrate effects; 1.6.3. Melting of a 2D crystal; 1.6.4. Substrate effects on 2D melting; 1.6.5. Scaling in superconducting films; 1.7. Experiments and Simulation; 1.7.1. Measurements on superfluid films; 1.7.2. Experimental measurements on 2D melting; 1.7.3. Simulations of 2D melting; References; 2. Duality, Gauge Symmetries, Renormalization Groups and the BKT Transition J. V. Jose; 2.1. Introduction; 2.2. Duality Transformations in the 2D XY Model; 2.3. Migdal Kadanoff RG

Approximation of the Two-Dimensional XY Model
2.4. Correlation Function Calculations and Renormalization Group Equations2.5. Symmetric Breaking Fields, Duality and RG Equations; 2.6. An Early Experimental Confirmation of the BKT Theory; 2.3. Conclusions; Acknowledgments; References; 3. Berezinskii-Kosterlitz-Thouless Transition through the Eyes of Duality G. Ortiz, E. Cobanera and Z. Nussinov; 3.1. Introduction; 3.2. The XY Model: A Paradigm of BKT Phenomenology; 3.2.1. A transfer operator for the XY model; 3.2.2. Hamiltonian form of the XY model; 3.2.3. Duality of the XY model without the Villain approximation
3.3. The p-Clock Model: A Close Relative of XY3.3.1. A transfer matrix for the p-clock model; 3.3.2. Hamiltonian form of the p-clock model; 3.3.3. Dualities of the p-clock model; 3.3.4. Self-dual classical p-clock model; 3.3.5. Exact and emergent symmetries of the p-clock model; 3.3.5.1. Non-Abelian, discrete symmetries; 3.3.5.2. Emergent U(1) symmetry; 3.4. Phase Diagram: From the p-Clock to the XY Model; Appendix A: Exponential of Shift Operators; Appendix B: Duality of the XY Model to q-Deformed Bosons; Appendix C: The Villain and Its Dual Solid-On-Solid Models
Appendix D: The p-Clock Model for p = 2, 3, and 4Appendix E: Peierls Argument for the p-Clock Model; References; 4. The Berezinskii-Kosterlitz-Thouless Transition in Superconductors A. M. Goldman; 4.1. Introduction; 4.2. Phenomenological Theory - Mostly Films; 4.3. Experimental Evidence - Films; 4.4. Phenomenological Theory - Arrays; 4.5. Experiments - Arrays; 4.6. Comments on Renormalization Effects; 4.7. Summary; Acknowledgments; References
5. Berezinskii-Kosterlitz-Thouless Transition within the Sine-Gordon Approach: The Role of the Vortex-Core Energy L. Benfatto, C. Castellani and T. Giamarchi

Sommario/riassunto

On the 40th anniversary of the Berezinskii-Kosterlitz-Thouless Theory (BKT), this informative volume looks back at some of the developments and achievements and varied physics applications which ensued from the beautiful BKT vortex-unbinding seminal idea.During the last four decades, BKT theory, which is undeniably one of the most important developments in condensed matter and theoretical physics of the second half of the twentieth century, has expanded widely. It has been used and extended from many different theoretical and experimental perspectives. New and unexpected features have been unc