

PUBLICATIONS

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Books

1. P. Brezany: **Input/Output Intensive Massively Parallel Computing (Language Support - Automatic Parallelization - Advanced Optimizations - Runtime Systems)**, Springer-Verlag, 1997.
2. M. Atkinson, P. Brezany, et al.: **THE DATA BONANZA - Improving Knowledge Discovery for Science, Engineering and Business**, WILEY-INTERSCIENCE (a John Wiley & Sons, Inc., Publication), April 2012.

Book Chapters

1. P. Brezany, O. Stepankova, M. Janatova, M. Uller, and M. Lenart. Optimized Management of BIG Data Produced in Brain Disorder Rehabilitation. In: *Ali Emrouznejad (Editor): Big Data Optimization: Recent Developments and Challenges*, Springer, 2016, pp 281-317.
2. P. Brezany, I. Janciak and A. Min Tjoa. GridMiner: An Advanced Support for e-Science Analytics. In: *Werner Dubitzky and Krzysztof Kurowski (Editors): Data Mining Techniques in Grid Computing Environments*, John Wiley & Sons Ltd, Chapter 3, 2008.
3. P. Brezany, I. Janciak and A. Min Tjoa. Ontology-Based Construction of Grid Data Mining Workflows. In: *Hector Oscar Nigro, Sandra Elizabeth Gonzalez Cisaro, and Daniel Hugo Xodo (Editors): Data Mining with Ontologies: Implementations, Findings, and Frameworks*. Hershey, 2007, pp. 182-210.
4. M. Janatova, M. Uller, O. Stepankova, P. Brezany, and M. Lenart. A Novel Big Data-Enabled Approach, Individualizing and Optimizing Brain Disorder Rehabilitation. In: *Ali Emrouznejad and Vincent Charles (Editors). Big Data for the Greater Good*, Springer, 2018, pp.101-128.

5. P. Brezany, M. Bubak, P. Luszczek, M. Malawski, K. Zajac. A Runtime Support for Large-Scale Irregular Computing on Clusters and Grids, In: *Y.C. Kwong, (Editor): Annual Review of Scalable Computing, Series on Scalable Computing, vol 5, Singapore University Press and World Scientific, 2003, Chapter 2, pp. 30-64*
6. Y. Han, I. Janciak, P. Brezany, and A. Goscinski. The CloudMiner - Moving Data Mining into Computational Clouds. In: *Sandro Fiore and Giovanni Aloisio (Editors): Grid and Cloud Database Management. Springer, Berlin Heidelberg, 2011, pp. 193-214.*
7. F. Khan and P. Brezany. Provenance Support for Data-Intensive Scientific Workflows. In: *Sandro Fiore and Giovanni Aloisio (Editors): Grid and Cloud Database Management. Springer, Berlin Heidelberg, 2011, pp. 193-214.*
8. L. Povoda, R. Burget, M. Rajnoha, and P. Brezany. A Novel Big Data Approach for Text Supported Service Operations Management. The chapter appears on February 22, 2022 In.: *Ali Emrouznejad and Vincent Charles (Editors). Big Data and Blockchain for Service Operations Management, Springer (Studies in Big Data, 98, Band 98).*

Journal Publications

1. P. Brezany, P. Czerwinski, and M. Winslett. A Generic Interface for Parallel Access to Large Data Sets from HPF Applications. *Future Generation of Computer Systems*, 17 (2001) Elsevier Science, pp.977-985, North-Holland.
2. A. Woehrer, P. Brezany, I. Janciak and E. Mehofer. Modeling and optimizing large-scale dataflows. *Future Generation Computer Systems*, 2014, 12-27.
3. H. Zima, P. Brezany, and B. Chapman. SUPERB and Vienna Fortran. *Parallel Computing*, North-Holland, 20 (1994), pp. 1487-1517.
4. Y. Zhang, L. Meng, H. Li, A. Woehrer, and P. Brezany. WS-DAI-DM: An interface specification for data mining in grid environments. *Journal of Software*, 6 (6), 2011, pp. 953-960.
5. A. Woehrer, L. Novakova, P. Brezany and A. Min Tjoa. Grid-Aware Approach to Data Statistics, Data Understanding, and Data Preprocessing. *International Journal of High performance Computing and Networking (IJHPCN), Special Issue on Performance Evaluation of Web and Grid Based Computing, Inderscience, Vol. 6, No. 1, 2009*
6. I. Elsayed and P. Brezany. Dataspace Support Platform for e-Science. *Computer Science, Volume 13 (1)*, pp. 49-61, ISSN 1508-2806, 2012.

7. I. Elsayed, G. Madey, and P. Brezany. Portals for collaborative research communities: two distinguished case studies. *Concurrency and Computation: Practice and Experience, Special Issue: IWPLS 2009, Volume 23, Issue 3*, pp. 269-278, 2011.
8. F. A. Khan, S. Hussain, I. Janciack, and P. Brezany. Towards Next Generation Provenance Systems for e-Science. *International Journal of Information System Modeling and Design (IJISMD), Vol. 2, Issue 3, DOI: 10.4018/ijismd, IGI Global*, 2011.
9. K.-L. Ong, A. Goscinski, Y. Han, P. Brezany, Z. Tari, L. Yan. SSC: Cloud-based data stream management in distributed environments. *International Journal of High Performance Computing and Networking. 9. 171*, 2016
10. Y. Zhang, L. Meng, F. Liu, H. Li, and P. Brezany. Decomposition of Association Rules Mining Process and Analysis of the Intermediate Results. *Journal of Computational Information Systems, 7 (9)*, pp. 3606-3613, 2011.
11. Zhang, Y. and Meng, L. and Liu, F. and Li, H. and Brezany, P. Towards the Optimization of Data Mining Execution Process in Distributed Environments. *Journal of Computational Information Systems, 7 (8)*. pp. 2922-2930, 2011.
12. Y. Zhang, L. Meng, H. Li, A. Woehrer, and P. Brezany. WS-DAI-DM: An interface specification for data mining in grid environments. *Journal of Software, 6 (6)*, pp. 953-960, 2011.
13. A. Woehrer, L. Novakova, P. Brezany, and A Min Tjoa. Grid-Aware Approach to Data Statistics, Data Understanding and Data Preprocessing. *International Journal of High Performance Computing and Networking (IJHPCN), Special Issue on Performance Evaluation of Web and Grid Based Computing, Inderscience, Vol. 6, No. 1*, 2009
14. A. Woehrer and P. Brezany. Towards a Novel Metadata Information Service for Distributed Data Management. *Journal of Networks, Issue 6/2007*, Academy Publisher.
15. P. Brezany, A. Woehrer and A Min Tjoa. The Grid: Vision, Technology Development and Applications. *e&i Themenheft Rechnernetze issue 6*, 2006,
16. A. Woehrer, P. Brezany and A Min Tjoa. Novel mediator architectures for Grid information systems. *Journal for Future Generation Computer Systems - Grid Computing: Theory, Methods and Applications*, January 2005, available online
17. P. Brezany and V. Sipkova. Compiling a Vector and Array Processing Language for an Associative Processor. *Microprocessing and Microprogramming 34*, North Holland, 1992, 171-174.

18. P. Brezany. Parallel Parsing in a Multiprocessor Environment. *Microprocessing and Microprogramming 24 (1988)*, North Holland, pp. 819-826.
19. P. Brezany. Denotational Semantics of Parallel Programming Languages. *Journal Kybernetika, Vol. 19*, Prague 1983, pp. 248-262

Conference Publications

1. P. Brezany, M. Gerndt, P. Mehrotra, and H. Zima. Concurrent File Operations in a High Performance Fortran. In *Proceedings of the Conference SUPERCOMPUTING'92*, USA, pp. 230-237.
2. P. Brezany, Y. Zhang, P. Chen, and S. Ye. An Elastic OLAP Cloud Platform. In: *International Conference on Cloud and Green Computing (CGC 2011)*, Sydney, Australia, 2011 – BEST CONFERENCE PAPER AWARD.
3. P. Brezany, M. Janatova, O. Stepankova, M. Lenart, M. Edward, M. Uller, R. Burget. Management of Physiological Data Streams within Brain Disorder Rehabilitation. In: *Proceedings of the 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)*, Croatia, 2019.
4. P. Brezany, M. Gerndt, V. Sipkova, and H. Zima. SUPERB Support for Irregular Scientific Computations. In: *Proceedings of the "Scalable High Performance Computing Conference '92"*, Williamsburg, USA, pp. 314-321.
5. P. Brezany, I. Janciak and A Min Tjoa. GridMiner: A Fundamental Infrastructure for Building Intelligent Grid Systems. In: *Proceedings of the 2005 IEEE/WIC/ACM International Conference on Web Intelligence (WI'05)*, Compiègne, France, September 19-22, 2005, pp. 150-156 -- BEST CONFERENCE PAPER AWARD.
6. P. Brezany, A. Goscinski, I. Janciak and A Min Tjoa. The Development of a Wisdom Autonomic Grid. In: *Proceedings of the Conference Knowledge Grid and Grid Intelligence 2004*, Beijing, Sept. 26, 2004.
7. P. Brezany and V. Sipkova. M2PLUS - a Modula-2 Based Parallel Programming Language and its Implementation. In: *Proceedings of the First International Modula-2 Conference*, Bled, Yugoslavia, 1989, 81-85.
8. P. Brezany. Compiling FORTRAN for Massively Parallel Architectures. In: *Proceedings of the 20th MSC European Users' Conference 1993*, September 20-22, 1993, Vienna.
9. V. Zvoncak; J. Mekyska, K. Safarova, Z. Smekal, P. Brezany. New Approach of Dysgraphic Handwriting Analysis Based on the Tunable Q-Factor Wavelet

Transform. In: *Proceedings of the 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)*, Croatia, 2019.

10. F. A. Khan, Y. Han, S. Pllana and P. Brezany. Estimation of Parameters Sensitivity for Scientific Workflows, In: *Proceedings of the 2009 International Conference on Parallel Processing Workshops*, pp. 457-462, 2009.
11. H. Zima, P. Brezany, B. Chapman, and J. Hullman. Automatic Parallelization for Distributed-Memory Systems: Experience and Current Research. Invited Paper, Spies, P. P. (Ed.): *Proceedings of the "Euro Arch '93" - European Informatics Congress: Computing Systems Architecture*, Munich, October 18-19, pp. 538-556, 1993.
12. I. Elsayed, T. Ludescher, A. Woehrer, T. Feilhauer, and P. Brezany. Data Life Cycle Management and Analytics Code Execution Strategies for the Breath Gas Analysis Domain. In: *Proceedings of the International Conference on Computational Science ICCS 2012*, Procedia Computer Science, 2012.
13. Y. Han, P. Brezany, Peter and Goscinski, Andrzej. Stream Management within the CloudMiner. In: *Proceedings of the International Conference on Algorithms and Architectures for Parallel Processing*, Melbourne, Australia, Springer, 2011.
14. I. Janciack, M. Lenart, P. Brezany, L. Novakova, and O. Habala. Visualization of the Mining Models on a Data Mining and Integration Platform. In: *Proceedings of the IEEE International Conference MIPRO*, Croatia, 2011.
15. S. Pllana, I. Janciak, P. Brezany, A. Woehrer. A Survey of the State of the Art in Data Mining and Integration Query Languages. In: *Proceedings of the International Conference on Network-Based Information Systems*, 2011.
16. I. Elsayed and P. Brezany. Towards large-scale scientific dataspace for e-science applications. In: *M. Yoshikawa, X. Meng, T. Yumoto, Q. Ma, L. Sun, and C. Watanabe (Editors): DASFAA Workshops, Springer, volume 6193 of Lecture Notes in Computer Science*, Tsukuba, Japan, pp. 69–80, 2010.
17. Ibrahim Elsayed, Thomas Ludescher, Philip Masser, Thomas Feilhauer, and P. Brezany. Grid-based scientific dataspace support platform for breath gas analysis. In: *J. Volkert, T. Fahringer, D. Kranzelmüller, R. Kobler, and W. Schreiner (Editors): Proceedings of the 3rd Austrian Grid Symposium, volume 269*, pages 154–168, Linz, Austria, 2010. Austrian Computer Society.
18. I. Elsayed, S. Lynden, I. Kojima, and P. Brezany. Semantic data infrastructure to support a scientific dataspace for breath gas analysis. In: *Proceedings of the UK e-Science All Hands Meeting*, Cardiff, UK, 2010.

19. A. Woehrer and P. Brezany. Performance Evaluation of WebRowSet Implementations. In: *Proceedings of the Third International Conference on Data Management in Grid and P2P Systems (GLOBE'10)*, Bilbao, Spain, 2010.
20. A. Woehrer, E. Mehofer and P. Brezany. Logical Optimization of Dataflows for Data Mining and Integration Processes. In: *Proceedings of the Workshop on Parallel Optimisation and Parameter Fitting held in conjunction with the IEEE e-Science Conference*, Brisbane, Australia, 2010.
21. Y. Zhang, H. Li, A. Woehrer, P. Brezany, and G. Dai. Decomposing Data Mining by a Process-oriented Execution Plan. In: *Proceedings of the International Conference on Artificial Intelligence and Computational Intelligence (AICI'10)*, LNAI 6319, Sanya, China, 2010.
22. A. Woehrer, S. Benkner and P. Brezany. Towards a Reference Model for the Runtime-phase of Semantic Data Mediation. In: *Proceedings of the International Symposium on Intelligent Distributed Computing, Studies in Computational Intelligence*, Springer, Tangier, Morocco, 2010.
23. F. A. Khan, I. Janciak and P. Brezany. Workflow Enactment Engine Independent Provenance Recording for e-Science Infrastructures. In: *Proceedings of the Fourth IEEE International Conference on Research Challenges in Information Science RCIS'10*, Nice, France, 2010.
24. F. A. Khan, S. Pllana, Y. Han, and P. Brezany. An Ant-Colony-Optimization Based Approach for Determination of Parameter Significance of Scientific Workflows. In: *Proceedings of the 24th IEEE International Conference on Advanced Information Networking and Applications (AINA)*, Perth, Australia, 2010.
25. I. Elsayed, T. Ludescher, K. Schwarz, T. Feilhauer, A. Amann, and P. Brezany. Towards realization of scientific dataspace for the breath gas analysis research community. In: *Proceedings of the 1st International Workshop on Portals for Life Sciences (IWPLS'09)*, UK, September 14-15, 2009.
26. A. Woehrer, Y. Zhang, Ehtesam-ul-Haq Dar, and P. Brezany. Unboxing Data Mining via Decomposition in Operators: Towards Macro Optimization and Distribution. In: *Proceedings of the International Conference on Knowledge Discovery and Information Retrieval*, Madeira, Portugal, 6 - 8 October, 2009.
27. A. Woehrer, T. Lustig and P. Brezany. Scalable Relational Query Results Handling in Service Oriented Architectures. In: *Proceedings of the International Workshop on High Performance Distributed Data Management (HPDDM09)*, London, Nov 2009.

28. I. Elsayed, A. Muslimovic and P. Brezany. Intelligent Dataspaces for e-Science. In: *Proceedings of the International Conference on Computational Intelligence, Man-Machine Systems and Cybernetics*, Cairo, Egypt, 2008. World Scientific and Engineering Academy and Society Press.
29. I. Elsayed, A. Muslimovic and P. Brezany. Scientific Data Management: a Life Cycle View. In: *Proceedings of the UK All Hands Meeting*, Edinburgh, 2008.
30. I. Janciak, C. Kloner and P. Brezany. Workflow Enactment Engine for WSRF-compliant services orchestration. In: *Proceedings of the 9th IEEE/ACM International Conference on Grid Computing (Grid 2008)*, Tsukuba, Japan.
31. A. Woehrer and P. Brezany. Active Integration of Databases in Grids for Scalable Distributed Query Processing. In: *Proceedings of the International Conference on Grid computing, High-Performance and Distributed Applications (GADA'08)*, Monterrey, Mexiko, November 13 - 14, 2008.
32. A. Woehrer and P. Brezany. A Monitoring Service for Relational Databases to Support Advanced Data Integration on the Grid. In: *Proceedings of the First International Conference on Complex, Intelligent and Software Intensive Systems (CISIC)*, Vienna, April 10 - 13, 2007.
33. I. Elsayed, P. Brezany and A Min Tjoa. Towards Realization of Dataspaces. In: *Proceedings of the 3rd International Workshop on Grid and P2P Computing Impacts on Large Scale Heterogeneous Distributed Database Systems (GLOBE'06)*, Krakow, Poland, September 4 - 8, 2006.
34. A. Woehrer, L. Novakova, P. Brezany, and A Min Tjoa. D3G: Novel Approaches to Data Statistics, Understanding and Preprocessing on the Grid. In: *Proceedings of the IEEE 20th International Conference on Advanced Information Networking and Applications*, Vienna, Austria, April 18 - 20, 2006.
35. A Min Tjoa, I. Janciak, A. Woehrer and P. Brezany. Providing an Integrated Framework for Knowledge Discovery on Computational Grids. In: *Proceedings of the 5th International Conference on Knowledge Management - Special Track on Knowledge Discovery and Semantic Technologies*, Graz, June 29 - 1 July 2005.
36. P. Brezany, C. Kloner, A Min Tjoa. Development of a Grid Service for Scalable Decision Tree Construction from Grid Databases. In: *Proceedings of the 6th International Conference on Parallel Processing and Applied Mathematics*, Poznan, Poland. September 11-14, Springer-Verlag, LNCS 2005.

37. A. Woehrer, M. Bloech, P. Brezany, G. Gruber, A. Langegger, H. Schentz, and W. Woess. Towards Semantic Data Integration for Advanced Data Analysis of Grid Data Repositories. In: *Proceedings of the the First Austrian Grid Symposium*, Schloss Hagenberg, Austria, December 1-2, 2005.
38. P. Brezany, I. Janciak, and A Min Tjoa. Data Mining on the Grid: Perspective from the GridMiner Experience. In: *Proceedings of the 5th Cracow Grid Workshop*, Poland, November 21-23, 2005.
39. G. Kickinger, P. Brezany, A Min Tjoa, and J. Hofer. Grid Knowledge Discovery Processes and an Architecture for Their Composition. In: *Proceedings of the IASTED Conference*, Innsbruck, Austria, February 17-19, 2004.
40. A. Woehrer, P. Brezany and I. Janciak. Virtualization of Heterogeneous Data Sources for Grid Information Systems. In: *Proceedings of the Symposium MIPRO 2004*, Opatija, Croatia, May 24-28, 2004.
41. G. Kickinger, P. Brezany and I. Janciak. User Driven Workflows for the Collaboration of Grid Services. In: *Proceedings of the Symposium MIPRO 2004*, Opatija, Croatia, May 24-28, 2004.
42. B. Fiser, U. Onan, I. Elsayed, P. Brezany, and A Min Tjoa. On-Line Analytical Processing on Large Databases Managed by Computational Grids. *Invited paper for the DEXA 2004*, Zaragoza, Spain, 30 August - 3 September 2004.
43. J. Hofer and P. Brezany. DIGIDT: Distributed Classifier Construction in the Grid Data Mining Framework GridMiner-Core. In: *Proceedings of the Workshop on Data Mining and the Grid (GM-Grid 2004) held in conjunction with the 4th IEEE International Conference on Data Mining (ICDM'04)*, Brighton, UK, November 1-4, 2004.
44. A. Woehrer, P. Brezany, I. Janciak and A Min Tjoa. Virtualizing Heterogeneous Data Sources on the Grid - Design Concepts and Implementation. In: *Proceedings of the Knowledge Grid and Grid Intelligence 2004*, Beijing, Sept. 26, 2004.
45. P. Brezany, A. Goscinski, I. Janciak and A Min Tjoa. The Development of a Wisdom Autonomic Grid. In: *Proceedings of the Knowledge Grid and Grid Intelligence 2004*, Beijing, Sept. 26, 2004.
46. P. Brezany, I. Janciak, A. Woehrer and A Min Tjoa. GridMiner: A Framework for Knowledge Discovery on the Grid - from a Vision to Design and Implementation. In: *Proceedings of the Cracow Grid Workshop*, Cracow, December 12-15, 2004.
47. P. Brezany, I. Janciak, A. Goscinski and A Min Tjoa. Towards an Autonomic Wisdom Grid. In: *Proceedings of the Workshop on Access to Knowledge*

through Grid in a Mobile World held in conjunction with the 5th International Conference on Practical Aspects of Knowledge Management, Vienna, December 2-3, 2004.

48. P. Brezany, A Min Tjoa, M. Rusnak, and I. Janciak. Knowledge Grid Support for Treatment of Traumatic Brain Injury Victims. In: *Proceedings of the International Conference on Computational Science and Its Applications*, Montreal, Canada, held from 18 May 2003 till 21 May 2003.
49. P. Brezany, J. Hofer, A Min Tjoa, and A. Woehrer. Towards an Open Service Architecture for Data Mining on the Grid. In: *Proceedings of the Conference on Database and Expert Systems Applications (DEXA)*, Prague, Czech Republic, held from 1 September 2003 till 5 September 2003.
50. P. Brezany, A Min Tjoa, H. Wanek, and A. Woehrer. Mediators in the Architecture of Grid Information Systems. In: *Proceedings of the Conference on Parallel Processing and Applied Mathematics*, Czestochowa, Poland, held from 7 September 2003 till 10 September 2003.
51. P. Brezany, A Min Tjoa, and I. Janciak. Towards the Wisdom Grid: Goals and Architecture. In: *Proceedings of the Conference on Parallel Processing and Applied Mathematics*, Czestochowa, Poland, held from 7 September 2003 till 10 September 2003.
52. P. Brezany, J. Hofer, A Min Tjoa, and A. Woehrer. GridMiner: An Infrastructure for Data Mining on Computational Grids. In: *Proceedings of the APAC Conference and Exhibition on Advanced Computing, Grid Applications and eResearch*, Queensland Australia, 29 September - 2 October 2003.
53. A Min Tjoa, P. Brezany and I. Janciak. Towards Grid Based Intelligent Information Systems. *Keynote Address at the 2003 International Conference on Parallel Processing*, Kaohsiung, Taiwan, October 6-9, 2003. (Extended Abstract).
54. G. Kicking, J. Hofer, A Min Tjoa, and P. Brezany. Workflow Management in GridMiner. In: *Proceedings of the 3rd Cracow Grid Workshop*, Cracow, Poland, October 27-29, 2003.
55. P. Brezany, M. Bubak, M. Malawski, and K. Zajac. Advanced Library Support for Irregular and Out-of-Core Parallel Computing. In: *Proceedings of the Conference HPCN 2001 Europe*, Amsterdam, Springer-Verlag, 2001.
56. P. Brezany, M. Bubak, M. Malawski, and K. Zajac. Irregular and Out-of-Core Parallel Computing on Clusters. In: *Proceedings of the Conference PPAM'2001*, Naleczow, Poland, Springer-Verlag, September 9-12, 2001.
57. P. Brezany, M. Bubak, M. Malawski, and K. Zajac. Large-Scale Scientific Irregular Computing on Clusters and Grids. In: *Proceedings of the*

International Conference on Computational Science - ICSS 2002, Amsterdam, The Netherlands, April 2002, pp.484-493.

58. P. Brezany, A. Hameurlain, P. Tomsich, R. Bruckner, and H. Kosch. Mobile Query Optimization Based on Agent-Technology for Distributed Data Warehouse and OLAP Applications. In: *Proceedings of the Workshop on Very Large Data Warehouses*, Aix-en-Provence, France, IEEE Press, September 2002, pp. 795-799.
59. P. Brezany, J. Lee, and M. Winslett. Parallel I/O Support for HPF on Computational Grids. In: *Proceedings of the 4th International Symposium, ISHPC 2002*, Kansai Science City, Japan, May 2002, pp. 538-550.
60. P. Brezany and V. Sipkova. Parallel I/O Support for HPF on Clusters, In: *Proceedings of the 1st IEEE/ACM International Symposium on Cluster Computing and the Grid*, Brisbane, Australia, May 15-18, 2001, pp. 186-193.
61. P. Brezany and M. Winslett. Advanced Data Repository Support for Java Scientific Programming. *Proceedings of the Conf. HPCN 1999 Europe, Amsterdam*, Springer-Verlag, LNCS 1593, pp.1127-1138, North-Holland.
62. P. Brezany and M. Dang. Language and Compiler Support for Out-of-Core Irregular Applications on Distributed-Memory Multiprocessors. In *Proceedings of the Workshop on Languages, Compilers, and Runtime Systems for Parallel Computers*, Pittsburgh, PA, May 1998.
63. P. Brezany, A. Choudhary, and M. Dang. Parallelization of Irregular Codes Including Out-of-Core Data and Index Arrays. In *Proceedings of Parallel Computing 1997 - PARCO'97*, Bonn, Germany, September 1997, Elsevier, North-Holland, pp. 132-140.
64. P. Brezany. Automatic Parallelization of Input/Output Intensive Applications (Invited paper). In: *Proceedings of the Second International Conference on Parallel Processing and Applied Mathematics*, Zakopane, Poland, September 2-5, 1997, pp. 1-13.
65. P. Brezany, A. Choudhary, and M. Dang. Parallelization of Irregular Out-of-Core Applications for Distributed-Memory Systems. In *Proceedings of the Conference HPCN 97 Europe*, Vienna, Austria, pp. 811-820, Springer-Verlag, LNCS 1225, April 1997.
66. P. Brezany and M. Dang. Advanced Optimizations for Parallel Irregular Out-of-Core Programs. In *Proceedings of the Workshop PARA-96*, Lyngby, Denmark, pp. 77-84, Springer-Verlag, LNCS 1184, August 1996.
67. P. Brezany, T. Mueck and E. Schikuta. A Software Architecture for Massively Parallel Input-Output. In *Proceedings of the Workshop PARA-96*, Lyngby, Denmark, pp. 85-96, Springer-Verlag, LNCS 1184, August 1996.

68. P. Brezany, T. Mueck and E. Schikuta. Mass Storage Support for a Parallelizing Compilation System. In *Proceedings of the Conference EUROSIM - HPCN Challenges 1996*. North Holland, Elsevier, June 1996, pp. 63-70.
69. P. Brezany, T. Mueck and E. Schikuta. Language, Compiler and Parallel Database Support for I/O Intensive Applications. In *Proceedings of the Conference HPCN 95 Europe*. Milan, Italy, May 1995, Springer-Verlag, LNCS, pp. 14-20.
70. P. Brezany, S. Grabner, K. Sowa, and R. Wissmueller. DeHiFo -- An Advanced HPF Debugging System. In: *Proceedings of PDP'99, 7th Euromicro Workshop on Parallel and Distributed Processing*, Funchal, Portugal, February 3rd-5th, 1999.
71. F. Andre, P. Brezany, Cheron, W. Denissen, J. Pazat, and K. Sanjari. A New Compiler Technology for Handling HPF Data Parallel Constructs. In: *Proceedings of the 3rd Workshop on Languages, and Run-Time Systems for Scalable Computers*, Troy, USA, May 22-24, 1995, Kluwer, pp. 279-282.
72. P. Brezany, A. Choudhary, and M. Dang: Parallelization of Irregular Out-of-Core Applications for Distributed-Memory Systems. In: *Proceedings of HPCN 97*, Vienna, April 1997, LNCS Vol.1225. Springer-Verlag (1997) 811-820.
73. P. Brezany and V. Sipkova. Coupling Parallel Data and Work Partitioners to the Vienna Fortran Compilation System. In: *Proceedings of the Conference EUROSIM - HPCN Challenges 1996*, North Holland, Elsevier, June 1996, pp. 55-62.
74. P. Brezany, V. Sipkova, B. Chapman, and R. Greimel. Automatic Parallelization of the AVL FIRE Benchmark for a Distributed-Memory System. In: *Proceedings of the Conference Applied Parallel Computing in Physics, Chemistry and Engineering Science*, Denmark, August 1995. Springer-Verlag, LNCS 1041, pp. 50-60.
75. P. Brezany, O. Cheron, K. Sanjari, and E. van Konijnenburg. Processing Irregular Codes within the PREPARE HPF Compiler. In: *Proceedings of the Fifth Workshop on Compilers for Parallel Computers*, Malaga, Spain, June 1995, pp. 225-232.
76. P. Brezany, O. Cheron, K. Sanjari, and E. van Konijnenburg. Processing Irregular Codes Containing Arrays with Multi-Dimensional Distributions by the PREPARE HPF Compiler. In: *Proceedings of the Conference HPCN 95 Europe*, Milan, Italy, May 1995, Springer-Verlag, LNCS 919, pp. 526-531.

77. S. Benkner, P. Brezany, and H. Zima. Processing Array Statements and Procedure Interfaces in the Prepare High Performance Fortran Compiler. In: *Proceedings of the 5th International Conference on Compiler Construction*, Edinburgh, U.K., April 1994, Springer-Verlag, LNCS 786, pp. 324-338.
78. S. Benkner, P. Brezany, and H. Zima. Compiling High Performance Fortran in the Prepare Environment. In: *Proceedings of the Fourth Workshop on Compilers for Parallel Computers*, Delft, Netherlands, December 13-16, 1993, pp. 105-116.
79. P. Brezany and M. Cepceková. Parallel Lexical and Syntactical Analysis on a Transputer Network. In: *Proceedings of the Symposium "Algorithms'91"*, Strbske Pleso, Czecho-Slovakia, 1991, pp. 44-49.
80. P. Brezany. Parallel Compilation on a Multiprocessor System. In: W. Handler (Editor): *CONPAR 86*, Springer-Verlag, LNCS, Vol. 237, Berlin, 1986), pp. 279-286.
81. J. Saltz, S. Hastings, S. Langella, S. Oster, T. Kurc, P. Payne, R. Ferreira, B. Plale, C. Goble, D. Ervin, A. Sharma, T. Pan, J. Permar, P. Brezany, F. Siebenlist, R. Madduri, I. Foster, K. Shanbhag, C. Mead, and N. C. Hong. A roadmap for caGrid, an enterprise Grid architecture for biomedical research. *Proceedings of HealthGrid 2008, Publication series Studies in Health Technology and Informatics, Volume 138*, Columbus, Ohio, U.S.A, pp. 224-237.
82. P. Brezany and L. Scepanek. Denotational Semantics and Generating Compilers of Parallel Programming Languages (in Slovak). In: *Proceedings of the Workshop "Modern Programming (MOP) 1980"*, Tatranska Lomnica, Slovakia, May 19-23, 1980.