Conferences

Yves Robert

Laboratoire LIP, UMR CNRS–ENS Lyon–INRIA 5668
Ecole Normale Supérieure de Lyon
69364 LYON Cedex 07, France
e-mail: Yves.Robert@ens-lyon.fr

References

[1] Yves Robert and Maurice Tchuente. A systolic array for the longest common subsequence problem. In *International workshop on High-Level Computer Architecture 84*, pages 6.1–6.9, University of Maryland, 1984.

[2] James H. Davenport and Yves Robert. VLSI and computer algebra: the gcd example. In J. Demongeot et al., editor, *Dynamical behaviour of cellular automata*, pages 359–367. Academic Press, 1985.

[3] Yves Robert and Maurice Tchuente. Special-purpose architectures for string processing. In *COGNITIVA 85*, pages 165–170, Paris, jun 1985.

[4] Michel Cosnard and Yves Robert. Complexity of parallel algorithms: the example of the QR decomposition of a rectangular matrix. In *COGNITIVA 85*, pages 707–712, Paris, jun 1985.

[5] Yves Robert and Maurice Tchuente. On some dynamical properties of monotone networks. In E. Bienenstock et al., editor, *Disordered Systems and Biological Organization*, volume vol. F20 of *NATO ASI F 20*, pages 49–52. Springer verlag, 1986.

[6] Yves Robert and Maurice Tchuente. Algorithmes systoliques pour la résolution de systèmes linéaires. In A. Arnold, editor, *Premier Colloque C3*, pages 225–242. Editions du CNRS, 1985.

[7] Yves Robert. Architectures systoliques: une introduction. In *Journées Calculs sur réseaux: théorie et applications*, CNRS, Paris, sept 1985.

[8] Michel Cosnard and Yves Robert. Complexity of the parallel QR decomposition of a rectangular matrix. In M. Feilmeier et al., editor, *Parallel Computing 85*, pages 123–128. North Holland, 1986.

[9] R. Jamier, A. Jerraya, and Yves Robert. Using a silicon compiler for computer algebra. In P. Chenin et al., editor, *Computers and computing*, pages 311–315. Masson, 1985.

[10] Michel Cosnard, Yves Robert, and Maurice Tchuente. Matching parallel algorithms with architectures: a case study. In G.I. Reijns and M.H. Barton, editors, *Highly parallel computers*, pages 127–144. IFIP North Holland, 1987.

[11] Michel Cosnard, Jean-Michel Muller, Yves Robert, and Denis Trystram. Computation costs versus communication costs in parallel Gaussian elimination. In M. Cosnard et al., editor, *Parallel Algorithms and architectures*, pages 19–29. North Holland, 1986.

[12] Michel Cosnard, El Mostafa Daoudi, Jean-Michel Muller, and Yves Robert. On parallel and systolic Givens factorization of dense matrices. In M. Cosnard et al., editor, *Parallel Algorithms and architectures*, pages 245–258. North Holland, 1986.

[13] James H. Davenport and Yves Robert. Implémentation VLSI d'algorithmes modulaires issus du calcul formel. In P. Chenin, editor, *Calcul Formel et Automatique*, pages 219–237. Editions du CNRS, 1987.

[14] Yves Robert and Denis Trystram. Systolic solution of the algebraic path problem. In W. Moore et al., editor, *Systolic Arrays*, pages 171–180. Adam Hilger, 1987.

[15] Michel Cosnard, Mounir Marrakchi, Denis Trystram, and Yves Robert. Gauss elimination algorithms for MIMD computers. In W. Handler et al., editor, *CONPAR 86*, volume Lecture Notes in Computer Science 237, pages 171–180. Springer Verlag, 1987.

[16] Denis Trystram and Yves Robert. Parallel implementation of the algebraic path problem. In W. Handler et al., editor, *CONPAR 86*, LNCS 237, pages 149–156. Springer Verlag, 1987.

[17] Alain Guyot, Bertrand Hochet, Christophe Mauras, Jean-Michel Muller, and Yves Robert. Scala: une cellule systolique programmable pour l'algèbre linéaire. In A. Arnold, editor, *Deuxième Colloque C3*, pages 183–204. Editions du CNRS, 1987.

[18] Bertrand Hochet, Patrice Quinton, and Yves Robert. Systolic solutions of linear systems over $GF(p)$ with partial pivoting. In M.J. Irwin and R. Stefanelli, editors, *IEEE 8-th Symposium on Computer Arithmetic*, pages 161–168. IEEE Computer Society Press, 1987.

[19] Michel Cosnard and Yves Robert. Implementing the nullspace algorithm over $GF(p)$ on a ring of processors. In E. Gelenbe and A.Riza Kaylan, editors, *2-nd Int. Symposium on Computer and Information Sciences*, pages 92–110, Bogazici University, Istanbul, 1987.

[20] Paolo Carnevali, Giuseppe Radicati, Yves Robert, and Piero Sguazzero. Efficient FORTRAN implementation of the Gaussian elimination and Householder reduction algorithms on the IBM 3090 vector multiprocessor. In E. Chiricozzi and A. D'Amico, editors, *Parallel Processing and Applications*, pages 297–302. North Holland, 1988.

[21] Yves Robert. Systolic algorithms and architectures. In F. Fogelman-Soulie et al., editor, *Automata networks in computer science*, pages 187–228. Manchester University Press, 1988.

[22] Kurt Appert, Giuseppe Radicati, Yves Robert, Sauro Succi, and Jan Vaclavik. Finite element modelling of weak plasma turbulence. In *8-ème Colloque Int. sur les Méthodes de Calcul Scientifique et Technique*, INRIA, Versailles, dec 1987.

[23] Yves Robert and Denis Trystram. Optimal scheduling algorithms for parallel Gaussian elimination. In E. Gelenbe, editor, *High Performance Computer Systems*, pages 41–52. North Holland, 1988.

[24] Michel Cosnard, Jean Duprat, and Yves Robert. Parallel triangularization in modular arithmetic. In M. Cosnard, editor, *Parallel Processing*, pages 207–220. North Holland, 1988.

[25] Giuseppe Radicati and Yves Robert. Parallel and vector conjugate gradient-like algorithms for sparse nonsymmetric linear systems. In *1988 ACM Int. Conference on Supercomputing*, pages 478–487. ACM Press, 1988.

[26] Yves Robert. Systolic arrays for path-finding problems. In C. Choffrut, editor, *Automata Networks*, LNCS 316, pages 68–81. Springer Verlag, 1989.

[27] Yves Robert and Bernard Tourancheau. LU and QR factorization on the FPS T Series hypercube. In C.R. Jesshope and K.D. Reinartz, editors, *CONPAR 88*, pages 516–525. Cambridge University Press, 1989.

[28] Hervé Le Verge, Patrice Quinton, Yves Robert, and Gilles Villard. A propos de la résolution d'un système linéaire dans un corps fini: algorithmes et machines parallèles. In A. Arnold, editor, *Troisième Colloque C3*, pages 187–203. Editions du CNRS, 1988.

[29] Yves Robert and Bernard Tourancheau. Impact of the architecture topology on data allocation strategies for gaussian elimination on the hypercube. In *4-th Conf. on Hypercube Concurrent Computers and Applications*, pages 693–696. Sandia National Laboratories Press, 1989.

[30] Yves Robert. Trends in parallel algorithms design. In M. Cosnard et al., editor, *Parallel and Distributed Algorithms*, pages 3–11. North Holland, 1989.

[31] Abdelhamid Benaini, Yves Robert, and Bernard Tourancheau. A new systolic architecture for the algebraic path problem. In J.M. Canny et al., editor, *Systolic Array Processors*, pages 73–82. Prentice Hall, 1989.

[32] Serge Miguet and Yves Robert. Dynamic programming on a ring of processors. In F. André and J.P. Verjus, editors, *Hypercube and Distributed Computers*, pages 19–33. North Holland, 1989.

[33] Abdelhamid Benaini and Yves Robert. A modular systolic linear array for Gaussian elimination. In *IFIP Workshop From Systolic Arrays to Neural Networks: Algorithms on Silicon*, Grenoble, dec 1989.

[34] Michel Cosnard, El Mostafa Daoudi, and Yves Robert. Complexity of the parallel Givens factorization on shared memory architectures. In H. Djidjev, editor, *Optimal algorithms*, LNCS 401, pages 86–105. Springer Verlag, 1989.

[35] Serge Miguet and Yves Robert. Path planning on a distributed memory architecture. In D.W. Walker et al., editor, *5-th Distributed Memory Computing Conference*, pages 124–130. IEEE Computer Society Press, 1990.

[36] Pierre Fraigniaud, Serge Miguet, and Yves Robert. Complexity of scattering on a ring of processors. In D.W. Walker, editor, *5-th Distributed Memory Computing Conference*, pages 1343–1347. IEEE Computer Society Press, 1990.

[37] Ken Grigg, Serge Miguet, and Yves Robert. Complexity of the symmetric matrix-vector product on a distributed memory architecture. In D.W. Walker, editor, *5-th Distributed Memory Computing Conference*, pages 1324–1333. IEEE Computer Society Press, 1990.

[38] Yves Robert and Bernard Tourancheau. Linear algebra algorithms on distributed memory machines. In J. G. McWhirter, editor, *Mathematics in Signal Processing II*, pages 665–687. Clarendon Press, 1990.

[39] Abdelhamid Benaini and Yves Robert. Spacetime-minimal systolic architectures for Gaussian elimination and the algebraic path problem. In S.Y. Kung et al., editor, *Application Specific Array Processors 90*, pages 746–757. IEEE Computer Society Press, 1990.

[40] Jian-Jin Li, Serge Miguet, Yves Robert, and Stéphane Ubéda. Image processing algorithms on distributed memory machines. In H. Burkhardt, editor, *From pixels to features: parallelism in image processing*, pages 13–29. North Holland, 1991.

[41] Yves Robert. Solving dense linear systems on systolic architectures. In E. Depreterre, editor, *Algorithms and parallel VLSI architectures*, pages 363–401. North Holland, 1991.

[42] Yves Robert. Gaussian elimination on distributed memory architectures. In E. Spedicato, editor, *Algorithms for linear systems: state of the art and new trends*, NATO ASI F 77, pages 253–276. Springer Verlag, 1991.

[43] Alain Darte, Yves Robert, and Tanguy Risset. Systolic systems. In P. J. Hargrave, editor, *2nd IEE Int. Specialist Seminar on Parallel Digital Processors*, volume 334 of *IEE Conference Publication*, pages 6–10. IEE Press, 1991.

[44] Serge Miguet and Yves Robert. Reduction operations on a distributed memory machine with a reconfigurable interconnection network. In Q. Stout and M. Wolfe, editors, *6-th Distributed Memory Computing Conference*, pages 678–685. IEEE Computer Society Press, 1991.

[45] Jian-Jin Li, Serge Miguet, and Yves Robert. Implementation of the Z-buffer algorithm on a reconfigurable network of processors. In M. Nivat, editor, *Actes du Colloque International sur le Traitement Parallèle des Images*, pages 321–336, Paris, dec 1991.

[46] Tanguy Risset and Yves Robert. Uniform but non-local DAGs: a trade-off between pure systolic and simd solutions. In M. Valero, editor, *IEEE Computer Society Press*, pages 296–308, 1991.

[47] Alain Darte, Tanguy Risset, and Yves Robert. Synthesizing systolic algorithms: some recent developments. In M. Valero et al., editor, *Application Specific Array Processors 91*, pages 373–386. IEEE Computer Society Press, 1991.

[48] Serge Miguet and Yves Robert. Elastic load balancing for image processing algorithms. In H.P. Zima, editor, *Parallel Computation*, LNCS 591, pages 438–451. Springer Verlag, 1992.

[49] Yves Robert and Siang W. Song. New techniques for cycle shrinking. In D. Etiemble and J.C. Syre, editors, *Parle 92*, LNCS 605, pages 449–464. Springer Verlag, 1992.

[50] Alain Darte and Yves Robert. Séquencement des nids de boucles. In M. Cosnard et al., editor, *Algorithmique Parallèle*, pages 343–368. Masson, 1992.

[51] Alain Darte, Leonid Khachiyan, and Yves Robert. Linear scheduling is close to optimality. In J.A.B. Fortes et al., editor, *Application Specific Array Processors 92*, pages 37–46. IEEE Computer Society Press, 1992.

[52] Alain Darte and Yves Robert. Scheduling uniform loop nests. In R. Melhem, editor, *ISMM Conference on Parallel and Distributed Systems*, pages 75–82. ISMM Press, 1992.

[53] Alain Darte, Tanguy Risset, and Yves Robert. Loop nest scheduling and transformations. In J.J. Dongarra et B. Tourancheau, editor, *Environments and Tools for Parallel Scientific Computing*, volume 6 of *Advances in Parallel Computing*, pages 309–332. North Holland, 1993.

[54] Alain Darte, Tanguy Risset, and Yves Robert. Formal methods for solving the algebraic path problem. In F. Catthoor and L. Svensson, editors, *Application-driven architecture synthesis*, pages 47–69. Kluwer, 1993.

[55] Alain Darte and Yves Robert. Communication-minimal mapping uniform loop nests onto distributed memory architectures. In L. Dadda and B. Wah, editors, *Application Specific Array Processors 93*, pages 1–14. IEEE Computer Society Press, 1993.

[56] Michèle Dion, Jean-Laurent Philippe, and Yves Robert. Parallelizing compilers: what can be achieved ? In W. Gentsch and U. Harms, editors, *HPCN Europe 1994*, LNCS 797, pages 447–456. Springer Verlag, 1994.

[57] Pierre Boulet, Alain Darte, Tanguy Risset, and Yves Robert. (Pen)-ultimate tiling ? In *SHPCC 94*, pages 568–576. IEEE Computer Society Press, 1994.

[58] Alain Darte and Yves Robert. The alignment problem for perfect uniform loop nests: NP-completeness and heuristics. In J.J. Dongarra and B. Tourancheau, editors, *Environments and Tools for Parallel Scientific Computing II*, pages 33–42. SIAM Press, 1994.

[59] Vincent Bouchitte, Pierre Boulet, Alain Darte, and Yves Robert. Evaluating array expressions on massively parallel machines with communication/computation overlap. In B. Buchberger and J. Volkert, editors, *Parallel Processing: CONPAR94 - VAPP VI*, LNCS 854, pages 713–724. Springer Verlag, 1994.

[60] Michèle Dion, Tanguy Risset, and Yves Robert. Resource-constrained scheduling of partitioned algorithms on processor arrays. In *EuroMicro Workshop on Parallel and Distributed Processing*, pages 571–580. IEEE Computer Society Press, 1995.

[61] Vincent Bouchitte, Pierre Boulet, Alain Darte, and Yves Robert. Heuristics for the evaluation of array expressions on state-of-the-art massively parallel machines. In M. Moonen and F. Catthoor, editors, *Algorithms and Parallel VLSI Architectures III*, pages 319–330. North Holland, 1995.

[62] Michèle Dion and Yves Robert. Mapping affine loop nests: new results. In B. Hertzberger and G. Serazzi, editors, *HPCN Europe 1995*, LNCS 919, pages 184–189. Springer Verlag, 1995.

[63] Alain Darte, Michèle Dion, and Yves Robert. A characterization of one-to-one modular mappings. In *Seventh IEEE Symposium on Parallel and Distributed Processing*, pages 382–389. IEEE Computer Society Press, 1995.

[64] Michèle Dion, Cyril Randriamaro, and Yves Robert. How to optimize residual communications ? In *10th International Parallel Processing Symposium*, pages 382–391. IEEE Computer Society Press, 1996.

[65] Pierre-Yves Calland, Alain Darte, and Yves Robert. A new guaranteed heuristic for the software pipelining problem. In *Tenth ACM International Conference on Supercomputing*, pages 261–269. ACM Computer Science Press, 1996.

[66] Pierre-Yves Calland, Alain Darte, Yves Robert, and Frédéric Vivien. On the removal of anti and output dependences. In J. Fortes, C. Mongenet, K. Parhi, and V. Taylor, editors, *Application Specific Systems, Architectures and Processors*, pages 353–364. IEEE Computer Society Press, 1996.

[67] Pierre-Yves Calland, Jack Dongarra, and Yves Robert. Tiling with limited resources. In L. Thiele, J. Fortes, K. Vissers, V. Taylor, T. Noll, and J. Teich, editors, *Application Specific Systems, Architectures and Processors*, pages 229–238. IEEE Computer Society Press, 1997.

[68] Frédéric Desprez, Jack Dongarra, Antoine Petitet, Cyril Randriamaro, and Yves Robert. Scheduling block-cyclic array redistribution. In *Parallel Computing'97*. North Holland, 1997.

[69] Frédéric Desprez, Jack Dongarra, Fabrice Rastello, and Yves Robert. Determining the idle time of a tiling: new results. In *Parallel Architectures and Compilation Techniques PACT'97*, pages 307–317. IEEE Computer Society Press, 1997.

[70] Pierre-Yves Calland, Anne Mignotte, Olivier Peyran, Yves Robert, and Frédéric Vivien. Retiming dags. In *IEEE/ACM Int. Workshop on Timing Issues in the Specification and Synthesis of Digital Systems TAU'97*, pages 123–128. University of Texas at Austin, 1997.

[71] Frédéric Desprez, Jack Dongarra, Antoine Petitet, Cyril Randriamaro, and Yves Robert. Block-cyclic array redistribution on networks of workstations. In M. Bubak, J. Dongarra, and J. Wasniewski, editors, *Recent Advances in Parallel Virtual Machine and Message Passing Interface*, LNCS 1332, pages 343–350. Springer Verlag, 1997.

[72] Christophe Barberet, Lionel Brunie, Frédéric Desprez, Gilles Lebourgeois, Yves Robert, Stéphane Ubéda, and Karine Van Heumen. Technology transfer within the ProHPC TTN at ENS Lyon. In P. Sloot, M. Bubak, and B. Hertzberger, editors, *HPCN Europe 1998*, LNCS 1401, pages 3–12. Springer Verlag, 1998.

[73] Frédéric Desprez, Jack Dongarra, Antoine Petitet, Cyril Randriamaro, and Yves Robert. Scheduling block-cyclic array redistribution. In E.H. D'Hollander, G.R. Joubert, F.J. Peters, and U. Trottenberg, editors, *Parallel Computing: Fundamentals, Applications and New Directions*, pages 227–234. North Holland, 1998.

[74] Frédéric Desprez, Stéphane Domas, Jack Dongarra, Antoine Petitet, Cyril Randriamaro, and Yves Robert. More on scheduling block-cyclic array redistribution. In *Proc. of 4th Workshop on Languages, Compilers, and Run-time Systems for Scalable Computers (LCR98)*, LNCS 1511, pages 275–287. Springer Verlag, 1998.

[75] Fabrice Rastello and Yves Robert. Loop partitioning versus tiling for cache-based multiprocessors. In *International Conference on Parallel and Distributed Computing and Systems PDCS'98, Las Vegas*, pages 477–483. IASTED Press, 1998.

[76] Vincent Boudet, Fabrice Rastello, and Yves Robert. Alignment and distribution is NOT (always) NP-hard. In Chyi-Nan Chen and Lionel M. Ni, editors, *ICPADS'98, Taiwan*, pages 648–657. IEEE Computer Society Press, 1998.

[77] Vincent Boudet, Fabrice Rastello, and Yves Robert. Algorithmic issues for (distributed) heterogeneous computing platforms. In Rajkumar Buyya and Toni Cortes, editors, *Cluster Computing Technologies, Environments, and Applications (CC-TEA'99)*, pages 709–712. CSREA Press, 1999.

[78] Vincent Boudet, Fabrice Rastello, and Yves Robert. A proposal for a heterogeneous cluster ScaLA-PACK (dense linear solvers). In Hamid R. Arabnia, editor, *International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'99)*, pages 1285–1291. CSREA Press, 1999.

[79] A. Petitet, H. Casanova, J. Dongarra, Y. Robert, and R.C. Whaley. Parallel and distributed scientific computing: A numerical linear algebra problem solving environment designer's perspective. In J. Blazewicz, K. Ecker, B. Plateau, and D.Trystram, editors, *Handbook on Parallel and Distributed Processing*, International Handbook on Information Systems, 3, pages 464–504. Springer Verlag, 2000. Available as LAPACK Working Note 139.

[80] Vincent Boudet, Antoine Petitet, Fabrice Rastello, and Yves Robert. Data allocation strategies for dense linear algebra kernels on heterogeneous two-dimensional grid. In *International Conference on Parallel and Distributed Computing and Systems (PDCS'99)*, pages 561–569. IASTED Press, 1999.

[81] Vincent Boudet, Fabrice Rastello, and Yves Robert. PVM implementation of heterogeneous ScaLA-PACK dense linear solvers. In J. Dongarra, E. Luque, and T. Margalef, editors, *Recent Advances in Parallel Virtual Machine and Message Passing Interface*, LNCS 1697, pages 333–340. Springer Verlag, 1999.

[82] Olivier Beaumont, Vincent Boudet, Fabrice Rastello, and Yves Robert. Load balancing strategies for dense linear algebra kernels on heterogeneous two-dimensional grids. In *14th International Parallel and Distributed Processing Symposium (IPDPS'2000)*, pages 783–792. IEEE Computer Society Press, 2000.

[83] Olivier Beaumont, Vincent Boudet, Fabrice Rastello, and Yves Robert. Matrix-matrix multiplication on heterogeneous platforms. In *2000 International Conference on Parallel Processing (ICPP'2000)*, pages 289–298. IEEE Computer Society Press, 2000.

[84] Olivier Beaumont, Vincent Boudet, Arnaud Legrand, Fabrice Rastello, and Yves Robert. Heterogeneity considered harmful to algorithm designers. In *Cluster'2000*, pages 403–404. IEEE Computer Society Press, 2000.

[85] Olivier Beaumont, Vincent Boudet, Arnaud Legrand, Fabrice Rastello, and Yves Robert. Dense linear algebra kernels on heterogeneous platforms. In *Parallel Matrix Algorithms and Applications*. Université de Neuchatel, 2000. Voir http://www.unine.ch/iiun/matrix/seminars/pmaa2000/sessions.html.

[86] Olivier Beaumont, Vincent Boudet, Arnaud Legrand, Fabrice Rastello, and Yves Robert. Heterogeneous matrix-matrix multiplication, or partitioning a square into rectangles: NP-completeness and approximation algorithms. In *EuroMicro Workshop on Parallel and Distributed Computing (EuroMicro'2001)*, pages 298–305. IEEE Computer Society Press, 2001.

[87] Alain Darte, Yves Robert, and Frédéric Vivien. Loop parallelization algorithms. In *Compiler Optimizations for Scalable Parallel Systems: Languages, Compilation Techniques and Run Time Systems*, LNCS 1808, pages 141–171. Springer Verlag, 2001.

[88] Vincent Boudet and Yves Robert. Scheduling heuristics for heterogeneous processors. In *2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2001)*, pages 2109–2115. CSREA Press, 2001.

[89] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Master-slave tasking with heterogeneous processors. In *2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2001)*, pages 857–863. CSREA Press, 2001.

[90] Olivier Beaumont, Arnaud Legrand, and Yves Robert. The master-slave paradigm with heterogeneous processors. In D.S. Katz, T. Sterling, M. Baker, L. Bergman, M. Paprzycki, and R. Buyya, editors, *Cluster'2001*, pages 419–426. IEEE Computer Society Press, 2001.

[91] Olivier Beaumont, Vincent Boudet, and Yves Robert. The iso-level scheduling heuristic for heterogeneous processors. In *PDP'2002, 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing*. IEEE Computer Society Press, 2002.

[92] Olivier Beaumont, Vincent Boudet, and Yves Robert. A realistic model and an efficient heuristic for scheduling with heterogeneous processors. In *HCW'2002, the 11th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2002.

[93] Olivier Beaumont, Larry Carter, Jeanne Ferrante, Arnaud Legrand, and Yves Robert. Bandwidth-centric allocation of independent tasks on heterogeneous platforms. In *International Parallel and Distributed Processing Symposium IPDPS'2002*. IEEE Computer Society Press, 2002.

[94] Olivier Beaumont, Vincent Boudet, Arnaud Legrand, Fabrice Rastello, and Yves Robert. Static data allocation and load balancing techniques for heterogeneous systems. In C.K. Yuen, editor, *Annual Review of Scalable Computing*, volume 4, chapter 1, pages 1–37. World Scientific, 2002.

[95] Cyril Banino, Olivier Beaumont, Arnaud Legrand, and Yves Robert. Scheduling strategies for master-slave tasking on heterogeneous processor grids. In *PARA'02: International Conference on Applied Parallel Computing*, LNCS 2367, pages 423–432. Springer Verlag, 2002.

[96] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Static scheduling strategies for heterogeneous systems. In *ISCIS XVII, Seventeenth International Symposium On Computer and Information Sciences*, pages 18–22. CRC Press, 2002.

[97] Olivier Beaumont, Arnaud Legrand, and Yves Robert. A polynomial-time algorithm for allocating independent tasks on heterogeneous fork-graphs. In *ISCIS XVII, Seventeenth International Symposium On Computer and Information Sciences*, pages 115–119. CRC Press, 2002.

[98] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Mixed task and data parallelism. In *Parallel Matrix Algorithms and Applications*. Université de Neuchatel, 2002.

[99] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Static scheduling strategies for dense linear algebra kernels on heterogeneous clusters. In *Parallel Matrix Algorithms and Applications*. Université de Neuchatel, 2002.

[100] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Ordonnancement en régime permanent pour plateformes hétérogènes. In *GRID'2002, Actes de l'école thématique sur la globalisation des ressources informatiques et des données*, pages 325–334. INRIA Lorraine, 2002.

[101] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Scheduling strategies for mixed data and task parallelism on heterogeneous clusters and grids. In *PDP'2003, 11th Euromicro Workshop on Parallel, Distributed and Network-based Processing*, pages 209–216. IEEE Computer Society Press, 2003.

[102] Olivier Beaumont, Arnaud Legrand, and Yves Robert. Optimal algorithms for scheduling divisible workloads on heterogeneous systems. In *HCW'2003, the 12th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2003.

[103] Hélène Renard, Yves Robert, and Frédéric Vivien. Static load-balancing techniques for iterative computations on heterogeneous clusters. In *Euro-Par-2003: International Conference on Parallel Processing*, LNCS 2790, pages 148–159. Springer Verlag, 2003.

[104] Arnaud Legrand, Hélène Renard, Yves Robert, and Frédéric Vivien. Mapping and load-balancing iterative computations on heterogeneous clusters. In *Euro-PVM-MPI-2003: Recent Advances in Parallel Virtual Machine and Message Passing Interface*, LNCS 2840, pages 586–594. Springer Verlag, 2003.

[105] Arnaud Giersch, Yves Robert, and Frédéric Vivien. Scheduling tasks sharing files on heterogeneous clusters. In *Euro-PVM-MPI-2003: Recent Advances in Parallel Virtual Machine and Message Passing Interface*, LNCS 2840, pages 657–660. Springer Verlag, 2003.

[106] Arnaud Legrand, Hélène Renard, Yves Robert, and Frédéric Vivien. Load-balancing iterative computations on heterogeneous clusters with shared communication links. In *PPAM-2003: Fifth International Conference on Parallel Processing and Applied Mathematics*, LNCS 3019, pages 930–937. Springer Verlag, 2003.

[107] Arnaud Giersch, Yves Robert, and Frédéric Vivien. Scheduling tasks sharing files on heterogeneous master-slave platforms. In *PDP'2004, 12th Euromicro Workshop on Parallel, Distributed and Network-based Processing*, pages 364–371. IEEE Computer Society Press, 2004.

[108] Olivier Beaumont, Arnaud Legrand, Loris Marchal, and Yves Robert. Pipelining broadcasts on heterogeneous platforms. In *International Parallel and Distributed Processing Symposium IPDPS'2004*. IEEE Computer Society Press, 2004.

[109] Olivier Beaumont, Arnaud Legrand, Loris Marchal, and Yves Robert. Steady-state scheduling on heterogeneous clusters: why and how? In *6th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2004*. IEEE Computer Society Press, 2004.

[110] Arnaud Legrand, Loris Marchal, and Yves Robert. Optimizing the steady-state throughput of scatter and reduce operations on heterogeneous platforms. In *6th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2004*. IEEE Computer Society Press, 2004.

[111] Olivier Beaumont, Arnaud Legrand, Loris Marchal, and Yves Robert. Complexity results and heuristics for pipelined multicast operations on heterogeneous platforms. In *2004 International Conference on Parallel Processing (ICPP'2004)*, pages 267–274. IEEE Computer Society Press, 2004.

[112] Olivier Beaumont, Arnaud Legrand, Loris Marchal, and Yves Robert. Assessing the impact and limits of steady-state scheduling for mixed task and data parallelism on heterogeneous platforms. In

HeteroPar'2004: International Conference on Heterogeneous Computing, jointly published with IS-PDC'2004: International Symposium on Parallel and Distributed Computing, pages 296–302. IEEE Computer Society Press, 2004.

[113] Arnaud Giersch, Yves Robert, and Frédéric Vivien. Scheduling tasks sharing files from distributed repositories. In *Euro-Par-2004: International Conference on Parallel Processing*, LNCS 3149, pages 148–159. Springer Verlag, 2004.

[114] Hélène Renard, Yves Robert, and Frédéric Vivien. Data redistribution algorithms for homogeneous and heterogeneous processor rings. In *International Conference on High Performance Computing HiPC'2004*, LNCS 3296, pages 123–132. Springer Verlag, 2004.

[115] Olivier Beaumont, Arnaud Legrand, Loris Marchal, and Yves Robert. Independent and divisible tasks scheduling on heterogeneous star-schaped platforms with limited memory. In *PDP'2005, 13th Euromicro Workshop on Parallel, Distributed and Network-based Processing*, pages 179–186. IEEE Computer Society Press, 2005.

[116] Loris Marchal, Yang Yang, Henri Casanova, and Yves Robert. A realistic network/application model for scheduling divisible loads on large-scale platforms. In *International Parallel and Distributed Processing Symposium IPDPS'2005*. IEEE Computer Society Press, 2005.

[117] Olivier Beaumont, Loris Marchal, and Yves Robert. Broadcast trees for heterogeneous platforms. In *International Parallel and Distributed Processing Symposium IPDPS'2005*. IEEE Computer Society Press, 2005.

[118] Loris Marchal, Pascale Primet, Yves Robert, and Jingdi Zeng. Optimizing network resource sharing in grids. In *IEEE Global Telecommunications Conference GlobeCom'2005*. IEEE Communications Society Press, 2005.

[119] Olivier Beaumont, Loris Marchal, and Yves Robert. Scheduling divisible loads with return messages on heterogeneous master-worker platforms. In *International Conference on High Performance Computing HiPC'2005*, LNCS. Springer Verlag, 2005.

[120] Olivier Beaumont, Vincent Boudet, Pierre-François Dutot, Arnaud Legrand, and Yves Robert. Fondements théoriques pour la conception d'algorithmes efficaces de gestion de ressources. In *Informatique répartie: architecture, parallélisme et systèmes*. Hermes Sciences, 2005.

[121] Jean-François Pineau, Yves Robert, and Frédéric Vivien. Off-line and on-line scheduling on heterogeneous master-slave platforms. In *PDP'2006, 14th Euromicro Workshop on Parallel, Distributed and Network-based Processing*. IEEE Computer Society Press, 2006.

[122] Olivier Beaumont, Larry Carter, Jeanne Ferrante, Arnaud Legrand, Loris Marchal, and Yves Robert. Centralized versus distributed schedulers for multiple bag-of-task applications. In *International Parallel and Distributed Processing Symposium IPDPS'2006*. IEEE Computer Society Press, 2006.

[123] Olivier Beaumont, Loris Marchal, Veronika Rehn, and Yves Robert. Fifo scheduling of divisible loads with return messages under the one-port model. In *HCW'2006, the 15th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2006.

[124] Jean-François Pineau, Yves Robert, and Frédéric Vivien. The impact of heterogeneity on master-slave on-line scheduling. In *HCW'2006, the 15th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2006.

[125] Loris Marchal, Pascale Primet, Yves Robert, and Jingdi Zeng. Optimal bandwidth sharing in grid environment. In *HPDC'2006, the 15th International Symposium on High Performance Distributed Computing*. IEEE Computer Society Press, 2006.

[126] Loris Marchal, Veronika Rehn, Yves Robert, and Frédéric Vivien. Scheduling and data redistribution strategies on star platforms. In *PDP'2007, 15th Euromicro Workshop on Parallel, Distributed and Network-based Processing*, pages 288–295. IEEE Computer Society Press, 2007.

[127] Matthieu Gallet, Yves Robert, and Frédéric Vivien. Scheduling communication requests traversing a switch: complexity and algorithms. In *PDP'2007, 15th Euromicro Workshop on Parallel, Distributed and Network-based Processing*, pages 39–46. IEEE Computer Society Press, 2007.

[128] Anne Benoit, Veronika Rehn, and Yves Robert. Strategies for replica placement in tree networks. In *HCW'2007, the 16th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2007.

[129] Jack Dongarra, Jean-François Pineau, Yves Robert, Zhiao Shi, and Frédéric Vivien. Revisiting matrix product on master-worker platforms. In *9th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2007*. IEEE Computer Society Press, 2007.

[130] Michel Cosnard and Yves Robert. Algorithmique parallèle. In *Encyclopédie de l'Informatique et des Systèmes d'Information*, pages 955–965. Vuibert, 2007.

[131] Anne Benoit and Yves Robert. Mapping pipeline skeletons onto heterogeneous platforms. In *ICCS'2007, the 7th International Conference on Computational Science*, LNCS 4487, pages 591–598. Springer Verlag, 2007.

[132] Anne Benoit, Veronika Rehn-Sonigo, and Yves Robert. Impact of QoS on replica placement in tree networks. In *ICCS'2007, the 7th 2007 International Conference on Computational Science*, LNCS 4487, pages 366–373. Springer Verlag, 2007.

[133] Anne Benoit and Yves Robert. Complexity results for throughput and latency optimization of replicated and data-parallel workflows. In *HeteroPar'2007: International Conference on Heterogeneous Computing, jointly published with Cluster'2007*. IEEE Computer Society Press, 2007.

[134] Anne Benoit, Veronika Rehn-Sonigo, and Yves Robert. Multi-criteria scheduling of pipeline workflows. In *HeteroPar'2007: International Conference on Heterogeneous Computing, jointly published with Cluster'2007*. IEEE Computer Society Press, 2007.

[135] Matthieu Gallet, Yves Robert, and Frédéric Vivien. Scheduling multiple divisible loads on a linear processor network. In *ICPADS'2007, the 13th International Conference on Parallel and Distributed Systems*, 2007.

[136] Jean-François Pineau, Yves Robert, Frédéric Vivien, and Jack Dongarra. Matrix product on heterogeneous master-worker platforms. In *PPoPP'2008, the 13th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming*, pages 53–62. ACM Press, 2008.

[137] Anne Benoit, Veronika Rehn-Sonigo, and Yves Robert. Optimizing latency and reliability of pipeline workflow applications. In *HCW'2008, the 17th Heterogeneous Computing Workshop*. IEEE Computer Society Press, 2008.

[138] Anne Benoit, Loris Marchal, Jean-François Pineau, Yves Robert, and Frédéric Vivien. Offline and online scheduling of concurrent bags-of-tasks on heterogeneous platforms. In *10th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2008*. IEEE Computer Society Press, 2008.

[139] Anne Benoit, Mourad Hakem, and Yves Robert. Fault tolerant scheduling of precedence task graphs on heterogeneous platforms. In *10th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2008*. IEEE Computer Society Press, 2008.

[140] Anne Benoit, Harald Kosch, Veronika Rehn-Sonigo, and Yves Robert. Bi-criteria pipeline mappings for parallel image processing. In *ICCS'2008, the 8th International Conference on Computational Science*, LNCS. Springer Verlag, 2008.

[141] Anne Benoit, Mourad Hakem, and Yves Robert. Realistic models and efficient algorithms for fault tolerant scheduling on heterogeneous platforms. In *ICPP'2008, the 37th International Conference on Parallel Processing*. IEEE Computer Society Press, 2008.

[142] Kunal Agrawal, Anne Benoit, and Yves Robert. Mapping linear workflows with computation/communication overlap. In *ICPADS'2008, the 14th IEEE International Conference on Parallel and Distributed Systems*, pages 195–202. IEEE Computer Society Press, 2008.

[143] Anne Benoit, Yves Robert, Arnold Rosenberg, and Frédéric Vivien. Static strategies for worksharing with unrecoverable interruptions. In *IPDPS'2009, the 23rd IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2009.

[144] Anne Benoit, Fanny Dufossé, and Yves Robert. On the complexity of mapping pipelined filtering services on heterogeneous platforms. In *IPDPS'2009, the 23rd IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2009.

[145] Anne Benoit, Henri Casanova, Veronika Rehn-Sonigo, and Yves Robert. Resource allocation strategies for in-network stream processing. In *11th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2009*. IEEE Computer Society Press, 2009.

[146] Anne Benoit, Fanny Dufossé, and Yves Robert. Filter placement on a pipelined architecture. In *11th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2009*. IEEE Computer Society Press, 2009.

[147] Anne Benoit, Loris Marchal, Jean-Francois Pineau, Yves Robert, and Frédéric Vivien. Resource-aware allocation strategies for divisible loads on large-scale systems. In *18th International Heterogeneity in Computing Workshop HCW 2009*. IEEE Computer Society Press, 2009.

[148] Jean-François Pineau, Yves Robert, and Frédéric Vivien. Energy-aware scheduling of flow applications on master-worker platforms. In *Euro-Par 2009 - Parallel Processing*, LNCS 5704, pages 195–202. Springer Verlag, 2009.

[149] Kunal Agrawal, Anne Benoit, Fanny Dufossé, and Yves Robert. Mapping filtering streaming applications with communication costs. In *21st ACM Symposium on Parallelism in Algorithms and Architectures SPAA 2009*. ACM Press, 2009.

[150] Yi Gu, Qishi Wu, Anne Benoit, and Yves Robert. Brief announcement – complexity analysis and algorithmic development for pipeline mappings in heterogeneous networks. In *28th ACM Symposium on Principles of Distributed Computing PODC 2009*. ACM Press, 2009.

[151] Anne Benoit, Yves Robert, Arnold Rosenberg, and Frédéric Vivien. Static worksharing strategies for heterogeneous computers with unrecoverable failures. In *HeteroPar'2009: Seventh Int. Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms, jointly published with Euro-Par 2009*, LNCS 6043, pages 71–80. Springer Verlag, 2010.

[152] Anne Benoit, Henri Casanova, Veronika Rehn-Sonigo, and Yves Robert. Resource allocation for multiple concurrent in-network stream-processing applications. In *HeteroPar'2009: Seventh Int. Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms, jointly published with Euro-Par 2009*, LNCS 6043, pages 81–90. Springer Verlag, 2010.

[153] Anne Benoit, Bruno Gaujal, Matthieu Gallet, and Yves Robert. Computing the throughput of replicated workflows on heterogeneous platforms. In *ICPP'2009, the 38th International Conference on Parallel Processing*. IEEE Computer Society Press, 2009.

[154] Anne Benoit, Mourad Hakem, and Yves Robert. Optimizing the latency of streaming applications under throughput and reliability constraints. In *ICPP'2009, the 38th International Conference on Parallel Processing*. IEEE Computer Society Press, 2009.

[155] Mathias Jacquelin, Loris Marchal, and Yves Robert. Complexity analysis and performance evaluation of matrix product on multicore architectures. In *ICPP'2009, the 38th International Conference on Parallel Processing*. IEEE Computer Society Press, 2009.

[156] Matthieu Gallet, Yves Robert, and Frédéric Vivien. Divisible load scheduling. In *Introduction to Scheduling*. Chapman and Hall/CRC Press, 2009.

[157] Anne Benoit and Yves Robert. Multi-criteria mapping techniques for pipeline workflows on heterogeneous platforms. In G.A. Gravvanis et al., editor, *Recent Developments in Grid Technology and Applications*, pages 65–99. Nova Science Publishers, 2009.

[158] Yves Robert and Frédéric Vivien. Algorithmic Issues in Grid Computing. In *Algorithms and Theory of Computation Handbook*. Chapman and Hall/CRC Press, 2009.

[159] Yi Gu, Qishi Wu, Anne Benoit, and Yves Robert. Optimizing end-to-end performance of distributed applications with linear computing pipelines. In *ICPADS'2009, the 15th International Conference on Parallel and Distributed Systems*. IEEE Computer Society Press, 2009.

[160] Kunal Agrawal, Anne Benoit, Loic Magnan, and Yves Robert. Scheduling algorithms for linear workflow optimization. In *IPDPS'2010, the 24th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2010.

[161] Anne Benoit, Paul Renaud-Goud, and Yves Robert. Performance and energy optimization of concurrent pipelined applications. In *IPDPS'2010, the 24th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2010.

[162] Anne Benoit, Loris Marchal, Yves Robert, and Frédéric Vivien. Algorithms and scheduling techniques for clusters and grids. In W. Gentzsch et al., editor, *Advances in Parallel Computing vol.18: High Speed and Large Scale Scientific Computing*, pages 27–51. IOS Press, 2009.

[163] Anne Benoit, Bruno Gaujal, Fanny Dufossé, Matthieu Gallet, and Yves Robert. Computing the throughput of probabilistic and replicated streaming applications. In *22nd ACM Symposium on Parallelism in Algorithms and Architectures SPAA 2010*. ACM Press, 2010.

[164] Anne Benoit, Hinde Lilia Bouziane, and Yves Robert. Optimizing the reliability of pipelined applications under throughput constraints. In *ISPDC'2010, the 9th International Symposium on Parallel and Distributed Computing*. IEEE Computer Society Press, 2010.

[165] Franck Cappello, Henri Casanova, and Yves Robert. Checkpointing vs. migration for post-petascale supercomputers. In *ICPP'2010, the 39th International Conference on Parallel Processing*. IEEE Computer Society Press, 2010.

[166] Anne Benoit, Fanny Dufossé, Alain Girault, and Yves Robert. Computing the throughput of replicated workflows on heterogeneous platforms. In *ICPP'2010, the 39th International Conference on Parallel Processing*. IEEE Computer Society Press, 2010.

[167] Anne Benoit, Paul Renaud-Goud, and Yves Robert. Sharing resources for performance and energy optimization of concurrent streaming applications. In *SBAC-PAD'2010, the 22nd International Symposium on Computer Architecture and High-Performance Computing*. IEEE Computer Society Press, 2010.

[168] Anne Benoit, Loris Marchal, Oliver Sinnen, and Yves Robert. Mapping pipelined applications with replication to increase throughput and reliability. In *SBAC-PAD'2010, the 22nd International Symposium on Parallel and Distributed Computing*. IEEE Computer Society Press, 2010.

[169] Anne Benoit, Hinde Lilia Bouziane, and Yves Robert. General vs. interval mappings for streaming applications. In *ICPADS'2010, the 16th International Conference on Parallel and Distributed Systems*. IEEE Computer Society Press, 2010.

[170] Yves Robert. Task graph scheduling. In *Encyclopedia of Parallel Computing*. Springer Verlag, 2011.

[171] Anne Benoit, Paul Renaud-Goud, and Yves Robert. Power-aware replica placement and update strategies in tree networks. In *IPDPS'2011, the 25th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2011.

[172] Mathias Jacquelin, Loris Marchal, Yves Robert, and Bora Uçar. On optimal tree traversals for sparse matrix factorization. In *IPDPS'2011, the 25th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2011.

[173] Henri Casanova, Fanny Dufossé, Yves Robert, and Frédéric Vivien. Scheduling parallel iterative applications on volatile resources. In *IPDPS'2011, the 25th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2011.

[174] Guillaume Aupy, Anne Benoit, Fanny Dufossé, and Yves Robert. Brief announcement – reclaiming the energy of a schedule: models and algorithms. In *23rd ACM Symposium on Parallelism in Algorithms and Architectures SPAA 2011*. ACM Press, 2011.

[175] Anne Benoit, Paul Renaud-Goud, and Yves Robert. On the performance of greedy algorithms for energy minimization. In *ICPP'2011, the 40th International Conference on Parallel Processing*. IEEE Computer Society Press, 2011.

[176] Anne Benoit, Rami Melhem, Paul Renaud-Goud, and Yves Robert. Energy-aware mappings of series-parallel workflows onto chip multiprocessors. In *ICPP'2011, the 40th International Conference on Parallel Processing*. IEEE Computer Society Press, 2011.

[177] Henricus Bouwmeester, Mathias Jacquelin, Julien Langou, and Yves Robert. Tiled QR factorization algorithms. In *SC'2011, the IEEE/ACM Conference on High Performance Computing Networking, Storage and Analysis*. ACM Press, 2011.

[178] Marin Bougeret, Henri Casanova, Mikael Rabie, Yves Robert, and Frédéric Vivien. Checkpointing strategies for parallel jobs. In *SC'2011, the IEEE/ACM Conference on High Performance Computing Networking, Storage and Analysis*. ACM Press, 2011.

[179] Franck Cappello, Mathias Jacquelin, Loris Marchal, Yves Robert, and Marc Snir. Comparing archival policies for BlueWaters. In *International Conference on High Performance Computing (HiPC'2011)*. IEEE Computer Society Press, 2011.

[180] Sushil K. Prasad, Almadena Yu. Chtchelkanova, Sajal K. Das, Frank Dehne, Mohamed Gouda, Anshul Gupta, Joseph JáJá, Krishna Kant, Anita La Salle, Richard LeBlanc, Manish Lumsdaine, David A. Padua, Manish Parashar, Viktor K. Prasanna, Yves Robert, Arnold L. Rosenberg, Sartaj Sahni, Behrooz Shirazi, Alan Sussman, Charles C. Weems, and Jie Wu. Nsf/ieee-tcpp curriculum initiative on parallel and distributed computing: core topics for undergraduates. In *SIGCSE"11, the 42nd ACM Tech. Symp. on Computer Science Education*, pages 617–618. ACM Press, 2011.

[181] Anne Benoit, Rami Melhem, Paul Renaud-Goud, and Yves Robert. Power-aware manhattan routing on chip multiprocessors. In *IPDPS'2012, the 26th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2012.

[182] Jack Dongarra, Mathieu Faverge, Thomas Hérault, Julien Langou, and Yves Robert. Hierarchical QR factorization algorithms for multi-core cluster systems. In *IPDPS'2012, the 26th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2012.

[183] Yves Robert, Frédéric Vivien, and Dounia Zaidouni. On the complexity of scheduling checkpoints for computational workflows. In *FTXS'2012, the Workshop on Fault-Tolerance for HPC at Extreme Scale, in conjunction with the 42nd Annual IEEE/IFIP Int. Conf. on Dependable Systems and Networks (DSN 2012)*. IEEE Computer Society Press, 2012.

[184] Guillaume Aupy, Anne Benoit, and Yves Robert. Energy-aware scheduling under reliability and makespan constraints. In *International Conference on High Performance Computing (HiPC'2012)*. IEEE Computer Society Press, 2012.

[185] Henri Casanova, Fanny Dufossé, Yves Robert, and Frédéric Vivien. Mapping tightly-coupled applications on volatile resources. In *PDP'2013, the 21st Euromicro Int. Conf. on Parallel, Distributed, and Network-Based Processing*. IEEE Computer Society Press, 2013.

[186] Jack Dongarra, Thomas Hérault, and Yves Robert. Revisiting the double checkpointing algorithm. In *15th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2013*. IEEE Computer Society Press, 2013.

[187] Henri Casanova, Fanny Dufossé, Yves Robert, and Frédéric Vivien. Scheduling tightly-coupled applications on heterogeneous desktop grids. In *22nd International Heterogeneity in Computing Workshop HCW 2013*. IEEE Computer Society Press, 2013.

[188] Aurélien Bouteiller, Franck Cappello, Jack Dongarra, Amina Guermouche, Thomas Hérault, and Yves Robert. Multi-criteria checkpointing strategies: response-time versus resource utilization. In *Euro-Par 2013 - Parallel Processing*, LNCS. Springer Verlag, 2013.

[189] Julien Herrmann, Loris Marchal, and Yves Robert. Model and complexity results for tree traversals on hybrid platforms. In *Euro-Par 2013 - Parallel Processing*, LNCS. Springer Verlag, 2013.

[190] Guillaume Aupy, Anne Benoit, Paul Renaud-Goud, and Yves Robert. Energy-aware checkpointing of divisible tasks with soft or hard deadlines. In *4th Int. Green Computing Conference IGCC 2013*. IEEE Computer Society Press, 2013.

[191] Anne Benoit, Loris Marchal, Yves Robert, Bora Uçar, and Frédéric Vivien. Scheduling for Large-Scale Systems. In *The Computing Handbook Set (Third Edition), vol. 1*. Chapman and Hall/CRC Press, 2014.

[192] Guillaume Aupy, Mathieu Faverge, Yves Robert, Jakub Kurzak, Piotr Luszczek, and Jack Dongarra. Implementing a systolic algorithm for QR factorization on multicore clusters with PaRSEC. In *PROPER'2013, the 6th Workshop on Productivity and Performance*, LNCS 8374. Springer Verlag, 2013.

[193] Guillaume Aupy, Anne Benoit, Thomas Hérault, Yves Robert, Frédéric Vivien, and Dounia Zaidouni. On the combination of silent error detection and checkpointing. In *PRDC 2013, the 19th IEEE Pacific Rim International Symposium on Dependable Computing*. IEEE Computer Society Press, 2013.

[194] Guillaume Aupy, Yves Robert, Frédéric Vivien, and Dounia Zaidouni. Checkpointing strategies with prediction windows. In *PRDC 2013, the 19th IEEE Pacific Rim International Symposium on Dependable Computing*. IEEE Computer Society Press, 2013.

[195] Di Sheng, Yves Robert, Frédéric Vivien, Derrick Kondo, Cho-Li Wang, and Franck Cappello. Optimization of cloud task processing with checkpoint-restart mechanism. In *SC'2013, the IEEE/ACM Conference on High Performance Computing Networking, Storage and Analysis*. ACM Press, 2013.

[196] Guillaume Aupy, Anne Benoit, Thomas Hérault, and Yves Robert. Optimal checkpointing period: time vs. energy. In *PMBS 2013, the 4th Int. Workshop on Performance Modeling, Benchmarking and Simulation of High Performance Computer Systems*. LNCS Springer Verlag, 2013.

[197] Guillaume Aupy, Anne Benoit, Paul Renaud-Goud, and Yves Robert. Energy-aware algorithms for task graph scheduling, replica placement and checkpoint strategies. In S. U. Khan and A. Y. Zomaya, editors, *Handbook on Data Centers*, pages 37–80. Springer Verlag, 2014.

[198] Mathieu Faverge, Julien Herrmann, Julien Langou, Bradley R. Lowery, Yves Robert, and Jack Dongarra. Designing LU-QR hybrid solvers for performance and stability. In *IPDPS'2014, the 28th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2014.

[199] Henri Casanova, Lipyeow Lim, Yves Robert, Frédéric Vivien, and Dounia Zaidouni. Cost-optimal execution of boolean query trees with shared streams. In *IPDPS'2014, the 28th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2014.

[200] George Bosilca, Aurélien Bouteiller, Thomas Hérault, Yves Robert, and Jack Dongarra. Assessing the impact of ABFT & Checkpoint composite strategies. In *16th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2014*. IEEE Computer Society Press, 2014.

[201] Julien Herrmann, Loris Marchal, and Yves Robert. Memory-aware list scheduling for hybrid platforms. In *16th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2014*. IEEE Computer Society Press, 2014.

[202] Julien Herrmann, Thomas Hérault, Loris Marchal, and Yves Robert. Determining the optimal redistribution for a given data partition. In *ISPDC'2014, the 13th International Symposium on Parallel and Distributed Computing*. IEEE Computer Society Press, 2014.

[203] Guillaume Aupy, Anne Benoit, Matthieu Journault, and Yves Robert. Power-aware replica placement in tree networks with multiple servers per client. In *Euro-Par-2014: International Conference on Parallel Processing*, LNCS 8632. Springer Verlag, 2014.

[204] Anne Benoit, Aurélien Cavelan, Yves Robert, and Hongyang Sun. Assessing general-purpose algorithms to cope with fail-stop and silent errors. In *PMBS 2014, the 5th Int. Workshop on Performance Modeling, Benchmarking and Simulation of High Performance Computer Systems*. LNCS Springer Verlag, 2014.

[205] Guillaume Aupy, Anne Benoit, Henri Casanova, and Yves Robert. Scheduling computational workflows on failure-prone platforms. In *17th Workshop on Advances in Parallel and Distributed Computational Models APDCM 2015*. IEEE Computer Society Press, 2015.

[206] Ana Gainaru, Guillaume Aupy, Anne Benoit, Franck Cappello, Yves Robert, and Marc Snir. Scheduling the I/O of HPC applications under congestion. In *IPDPS'2015, the 29th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2015.

[207] Massimiliano Fasi, Yves Robert, and Bora Uçar. Combining backward and forward recovery to cope with silent errors in iterative solvers. In *PDSEC'2015, the 16th Workshop on Parallel and Distributed Scientific and Engineering Computing*. IEEE Computer Society Press, 2015.

[208] Aurélien Cavelan, Hongyang Sun, Yves Robert, and Frédéric Vivien. Voltage overscaling algorithms for energy-efficient workflow computations with timing errors. In *FTXS'2015, the Workshop on Fault-Tolerance for HPC at Extreme Scale, in conjunction with HPDC'2015*. IEEE Computer Society Press, 2015.

[209] Aurélien Cavelan, Saurabh K. Raina, Yves Robert, and Hongyang Sun. Assessing the impact of partial verifications against silent data corruptions. In *ICPP'2015, the 44th Int. Conf. on Parallel Processing*. IEEE Computer Society Press, 2015.

[210] Aurélien Cavelan, Hongyang Sun, Yves Robert, and Frédéric Vivien. Scheduling independent tasks with voltage overscaling. In *PRDC 2015, the 21st IEEE Pacific Rim International Symposium on Dependable Computing*. IEEE Computer Society Press, 2015.

[211] Leonardo Bautista-Gomez, Anne Benoit, Aurélien Cavelan, Saurabh K. Raina, Yves Robert, and Hongyang Sun. Which verification for soft error detection? In *International Conference on High Performance Computing (HiPC'2015)*. IEEE Computer Society Press, 2015.

[212] Anne Benoit, Aurélien Cavelan, Yves Robert, and Hongyang Sun. Two-level checkpointing and partial verifications for linear task graphs. In *PMBS 2015, the 6th Int. Workshop on Performance Modeling, Benchmarking and Simulation of High Performance Computer Systems*. LNCS Springer Verlag, 2015.

[213] Humayun Kabir, Joshua Booth, Guillaume Aupy, Anne Benoit, Yves Robert, and Padma Raghavan. STS-k: A multi-level sparse triangular solution scheme for NUMAmulticores. In *SC'2015, the IEEE/ACM Conference on High Performance Computing Networking, Storage and Analysis*. ACM Press, 2015.

[214] Anne Benoit, Aurélien Cavelan, Yves Robert, and Hongyang Sun. SOptimal resilience patterns to cope with fail-stop and silent errors. In *IPDPS'2016, the 30th IEEE International Parallel and Distributed Processing Symposium*. IEEE Computer Society Press, 2016.