

# 1 Publications

## International peer reviewed journal [ACL]

2010

- [1] F. Diedrich, K. Jansen, F. Pascual, and D. Trystram. Approximation algorithms for scheduling with reservations. *Algorithmica*, 58(2) :391–404, 2010.

2009

- [2] A. Girault, É. Saule, and D. Trystram. Reliability versus performance for critical applications. *Journal of Parallel and Distributed Computing*, 69(3) :326–336, Mar. 2009.
- [3] W. Nasri, L. A. Steffanel, and D. Trystram. Adaptive approaches for efficient parallel algorithms on cluster-based systems. *International Journal of Grid and Utility Computing*, 1(2) :98–108, 2009.
- [4] F. Pascual, K. Rzađca, and D. Trystram. Cooperation in Multi-Organization Scheduling. *Concurrency and Computation : Practice and Experience*, (21) :905–921, 2009. Extended version selected among the best papers of EuroPar 2008.
- [5] K. Rzađca and D. Trystram. Promoting Cooperation in Selfish Computational Grids. *European Journal of Operational Research*, (199) :647–657, 2009.
- [6] É. Saule and D. Trystram. Analyzing Scheduling with Transient Failures. *Information Processing Letters*, 109(11) :539–542, 2009.
- [7] A. Tchernykh, D. Trystram, C. Brizuela, and I. Scherson. Idle regulation in non-clairvoyant scheduling of parallel jobs. *Discrete Applied Mathematics*, (157) :364–376, 2009.

2008

- [8] L. A. Steffanel, M. Martinasso, and D. Trystram. Assessing contention effects of all-to-all communications on clusters and grids. *International Journal of Pervasive Computing and Communications*, 4(4) :440–459, 2008.

2007

- [9] C. Brizuela, L. Gonzalez-Gurrola, A. Tchernykh, and D. Trystram. Sequencing by hybridization : an enhanced crossover operator for a hybrid genetic algorithm. *Journal of Heuristics*, 13(3) :209–225, June 2007.
- [10] G. Mounié, C. Rapine, and D. Trystram. A  $3/2$ -Dual Approximation Algorithm for Scheduling Independent Monotonic Malleable Tasks. *SIAM Journal on Computing*, 37(2) :401–412, 2007.

2006

- [11] J. Blazewicz, M. Y. Kovalyov, M. Machowiak, D. Trystram, and J. Weglarz. Preemptable Malleable Task Scheduling Problem. *IEEE Transactions on Computers*, 55(4) :486–490, 2006.
- [12] A. Goldman, J. Peters, and D. Trystram. Exchanging messages of different size. *Journal of Parallel and Distributed Computing*, 66(3) :1–18, 2006.
- [13] G. Parmentier, D. Trystram, and J. Zola. Large scale multiple sequence alignment with simultaneous phylogeny inference. *Journal of Parallel and distributed computing*, 66(3) :1534–1545, 2006.

2005

- [14] P.-F. Dutot, L. Eyraud, G. Mounié, and D. Trystram. Scheduling on large scale distributed platforms : from models to implementations. *Special Issue of the International Journal of Foundations of Computer Science (IJFCS)*, 16(2) :217–237, Apr. 2005.

## 2004

- [15] J. Blazewicz, M. Y. Kovalyov, M. Machowiak, D. Trystram, and J. Weglarz. Malleable Tasks scheduling to minimize the makespan. *Annals of Operations Research*, 2004.
- [16] S. Fidanova and D. Trystram. Improved lower bounds for embedding hypercubes on de Bruijn graphs. *Journal of Parallel and Distributed Computing*, 64(3) :327–329, 2004.
- [17] A. Goldman and D. Trystram. An efficient parallel algorithm for solving the Knapsack problem on hypercubes. *Journal of Parallel and Distributed Computing*, 64(11) :1213–1222, 2004.

## 2003

- [18] A. Gupta, G. Parmentier, and D. Trystram. Scheduling precedence task graphs with disturbances. *RAIRO Operational Research*, 37(3) :145–156, 2003.

## 2002

- [19] W. Kubiak, B. Penz, and D. Trystram. Scheduling independent chains on uniform processors. *J. of Scheduling*, 5 :459–476, 2002.
- [20] R. Lepère, G. Mounié, and D. Trystram. An Approximation Algorithm for Scheduling Trees of Malleable Tasks. *European Journal of Operational Research*, 142(2) :242–249, Oct. 2002.
- [21] R. Lepère, D. Trystram, and G. J. Woeginger. Approximation Scheduling For Malleable Tasks under Precedence constraints. *International Journal of Foundation in Computer Science*, 13(4) :613–627, 2002.
- [22] W. Zimmermann, W. Lowe, and D. Trystram. On scheduling send-graphs and receive-graphs under the LogP-model. *Information Processing Letters*, 82 :83–92, 2002.

## 2001

- [23] B. Penz, C. Rapine, and D. Trystram. Sensitivity analysis of scheduling algorithms. *European Journal of Operational research*, 134 :606–615, 2001.

## 2000

- [24] É. Blayo, L. Debreu, G. Mounié, and D. Trystram. Dynamic Load Balancing for Adaptive Mesh Ocean Circulation Model. *Engineering Simulations*, 22(2) :8–24, 2000.
- [25] J. Blazewicz, F. Guinand, B. Penz, and D. Trystram. Scheduling Complete Trees on Two Uniform Processors with Integer Speed Ratios and Communication Delays. *Parallel Processing Letters*, 10(4) :267–277, 2000.
- [26] J. Blazewicz, M. Machowiak, G. Mounié, and D. Trystram. Scheduling Malleable Tasks with Convex Processing Speed Functions. *Computacion y Sistemas*, pages 158–165, Dec. 2000.
- [27] J. Blazewicz, M. Machowiak, G. Mounié, and D. Trystram. Sub-optimal Approach to Scheduling Malleable Tasks. *Computational Methods in Science and Technology*, 6 :25–40, 2000.
- [28] A. Goldman, G. Mounié, and D. Trystram. 1-optimality of static BSP computations : scheduling independent chains as a case study. *Theoretical Computer Science*, 290 (3) :1331–1359, 2000.
- [29] F. Guinand and D. Trystram. Scheduling UET trees with communication delays on two processors. *RAIRO Operational Research*, 34(2) :131–144, 2000.
- [30] T. Kalinowski, I. Kort, and D. Trystram. List Scheduling of general Task Graphs under LogP Model. *Parallel Computing*, 26 :1109–1128, 2000.

## 1999

- [31] J. Blazewicz, M. Drozdowski, F. Guinand, and D. Trystram. Scheduling a divisible task in a two-dimensional toroidal mesh. *Discrete Applied Mathematics*, 94 :35–50, 1999.
- [32] I. Kort and D. Trystram. Some results on scheduling flat trees in LogP model. *Journal of Information Systems and Operational Research (INFOR)*, 37(1) :57–76, 1999.
- [33] B. Penz, C. Rapine, and D. Trystram. Une classe d’heuristiques par appariement pour le problème du flow-shop a deux machines. *APII-JESA*, 33(5-6) :553–568, juillet 1999.

## 1998

- [34] J. Blazewicz, M. Drozdowski, F. Guinand, and D. Trystram. Scheduling a divisible task in a 2D toroidal mesh. *Discrete Applied Mathematics*, 94 :35–50, 1998.
- [35] J. Blezewicz, M. Drozdowski, F. Guinand, and D. Trystram. Scheduling a divisible task in a 2D toroidal mesh. *Discrete Applied Mathematics*, 94 :35–50, 1998.
- [36] J.-C. Konig, P. Rao, and D. Trystram. Analysis of Gossiping Algorithms with restricted buffers. *Parallel Algorithms and Applications*, 13 :117–133, 1998.
- [37] J. Mattes, D. Trystram, and J. Demongeot. Parallel Image Processing using Neural networks : applications in contrast enhancement of medical images. *Parallel Processing Letters*, 8(1) :63–76, 1998.

## 1997

- [38] E. Bampis, F. Guinand, and D. Trystram. Some models for Scheduling parallel programs with Communication delays. *Discrete Applied Mathematics*, (72) :5–24, 1997.
- [39] B. Dumitrescu, M. Doreille, J.-L. Roch, and D. Trystram. Two-dimensional block partitionings for the parallel sparse Cholesky factorization. *Numerical Algorithms*, 16 :17–38, 1997.
- [40] F. Guinand, C. Rapine, and D. Trystram. Worst case analysis of Lawler’s algorithm for scheduling trees with communication delays. *IEEE Trans. on Parallel and Distributed Systems*, 8(10) :1085–1086, 1997.

## 1996

- [41] E. Bampis, F. Guinand, and D. Trystram. Minimizing the overhead for some tree-scheduling problems. *European Journal of Operational Research*, 94 :261–270, 1996.
- [42] E. Bampis, J.-C. Konig, and D. Trystram. Minimizing the schedule length for a parallel 3D-grid precedence graph. *European Journal of Operational Research*, 95 :427–438, 1996.
- [43] J. Blazewicz, P. Bouvry, F. Guinand, and D. Trystram. Scheduling Complete Intrees on Two Uniform Processors with Communication Delays. *Information Processing Letters*, 58(5) :255–263, 1996.
- [44] C. Calvin and D. Trystram. Matrix Transpose for Block Allocations on Torus and de Bruijn Networks. *Journal of Parallel Distributed Computing*, 34(1) :36–49, 1996.
- [45] L. Colombet, P. Michallon, and D. Trystram. Parallel Matrix-Vector Product on Rings with a Minimum of Communications. *Parallel Computing*, 22(2) :289–310, 1996.
- [46] J.-P. Kitajima, P. Bouvry, B. Plateau, and D. Trystram. ANDES : Evaluating Mapping Strategies with Synthetic Programs. *Journal of Systems Architecture*, 42(5) :351–365, Nov. 1996.

## 1995

- [47] E. Bampis, J.-C. Konig, and D. Trystram. Optimal Parallel Execution of Complete Binary Trees and Grids Into Most Popular Interconnection Networks. *Theoretical Computer Science*, 147 :1–18, 1995.

## 1994

- [48] B. Braschi and D. Trystram. A New Insight into the Coffman-Graham Algorithm. *SIAM Journal on Computing*, 23(3) :662–669, 1994.
- [49] B. Dumitrescu, J.-L. Roch, and D. Trystram. Fast Matrix Multiplications Algorithms on MIMD Architectures. *Parallel Algorithms and Applications*, 4(2), 1994.
- [50] P. Michallon and D. Trystram. Practical experiments of broadcasting algorithms on a configurable parallel computer. *Discrete Applied Mathematics*, 53(1-3) :291–298, 1994.

## 1993

- [51] D. Delesalle, L. Desbat, and D. Trystram. Révolution de grands systèmes creux par méthodes itératives parallèles. *RAIRO Mathematical Modelling and Numerical Analysis*, 27(6) :651–671, 1993.

## 1992

- [52] E. Bampis, J.-C. Konig, and D. Trystram. A Low Overhead Schedule for a 3D-Grid Graph. *Parallel Processing Letters*, 2 :363–372, 1992.
- [53] J.-C. Bermond, P. Michallon, and D. Trystram. Broadcasting in wraparound meshes with parallel monodirectional links. *Parallel Computing*, 18(6) :639–648, 1992.
- [54] B. Plateau and D. Trystram. Optimal total exchange for a 3-d torus of processors. *Information Processing Letters*, 42(2), May 1992.

## 1991

- [55] E. Bampis, J.-C. Konig, and D. Trystram. Impact of communications on the complexity of the parallel Gaussian Elimination. *Parallel Computing*, 17(1) :55–61, 1991.

## 1990

- [56] J.-Y. Blanc, P. Comon, and D. Trystram. Using preconditioned conjugate gradient for solving consecutive linear systems. *Communications in Applied Numerical Methods*, 6 :231–240, 1990.
- [57] P. Comon, Y. Robert, and D. Trystram. Systolic implementation of the adaptive solution to normal equations. *Computer Vision, Graphics, and Image Processing*, 52(3) :402–408, 1990.
- [58] P. Laurent-Gengoux and D. Trystram. A new presentation of the conjugate direction algorithm. *Journal of Computational and applied Mathematics*, 32 :417–422, 1990.

## 1989

- [59] J. Blanc, P. Michallon, B. Tourancheau, D. Trystram, and F. Vincent. ANALYSIS OF BASIC NUMERICAL ROUTINES ON THE FPS T20 HYPERCUBE. *Hypercube and Distributed Computers : Proceedings of the First European Workshop on Hypercube and Distributed Computers held in Rennes, France, 4-6 October, 1989*, page 365, 1989.
- [60] M. Cosnard and D. Trystram. Communication complexity of Gaussian elimination on an MIMD shared memory parallel computer. *Revista de matematicas Aplicadas*, 10, 1989.
- [61] Y. Robert and D. Trystram. Optimal Scheduling Algorithms for Parallel Gaussian Elimination. *Theoretical Computer Science*, 64(2) :159–173, 1989.

1988

- [62] M. Cosnard, M. Marrakchi, Y. Robert, and D. Trystram. Parallel Gaussian elimination on an MIMD computer. *Parallel Computing*, 6(3) :275–296, 1988.
- [63] G. Dilintas, P. Laurent-Gengoux, and D. Trystram. A conjugate projected gradient method with preconditioning for unilateral contact problem. *Computers and Structures*, 29(4) :275–296, 1988.
- [64] Y. Robert and D. Trystram. Comments on scheduling parallel iterative methods on multiprocessor systems. *Parallel Computing*, 7(2) :253–255, 1988.

1987

- [65] P. Comon and D. Trystram. An incomplete factorization algorithm for adaptive filtering. *Signal processing*, 13 :353–360, 1987.
- [66] M. Cosnard, Y. Robert, and D. Trystram. Parallel solution of dense linear systems using diagonalization methods. *Internat. journal of Computer Mathematics*, 22, 1987.
- [67] Y. Robert and D. Trystram. Systolic solution of the Algebraic Path Problem. *Computing*, 39, 1987.

### National peer reviewed journal [ACLN]

2002

- [68] M. A. Aloulou, M. Sevaux, A. Rossi, M.-L. Espinouse, A. Moukrim, A. Vignier, B. Penz, C. Eswein, C. ARTIGUES, C. Picouveau, C. Thomas, S. Dazere-Peres, C. Briand, D. Trystram, E. Neron, E. Poder, E. Sanlaville, F. Sourd, M.-C. Portmann, and J.-C. Billaut. Flexibilité et Robustesse en Ordonnancement. *Le bulletin de la ROADEF*, (8) :3 p, 2002.

2000

- [69] F. Capello, D. Litaize, J.-F. Mehaut, C. Morin, S. Petiton, and D. Trystram. Metacomputing : vers une nouvelle dimension pour les calcul à haute performance. *Technique et Science Informatique*, 19(6) :877–902, 2000.

1994

- [70] J.-L. Roch and D. Trystram. Méthodologies pour la programmation efficace d'Applications Parallèles. *La lettre des calculateurs distribués - numéro spécial Actes de l'Ecole SPI Lyon juillet 94*, 1994.

1989

- [71] J.-C. König and D. Trystram. Ordonnancement du graphe à deux pas pour le calcul parallèle. *Comptes Rendus de l'Académie des Sciences, série 1*, 6 :569–572, 1989.
- [72] D. Trystram and F. Vincent. Programmation avancée du Transputer : architecture et mécanismes. *La lettre du Transputer*, 1989.

1988

- [73] J.-C. König, Y. Robert, and D. Trystram. Optimalité d'une classe d'algorithmes d'ordonnancement pour le graphe à deux pas. *Comptes Rendus de l'Académie des Sciences, série 1*, 5 :295–298, 1988.
- [74] J.-M. Muller and D. Trystram. Architectures pour la transformée de Fourier. *Traitement du Signal*, 5(6) :405–420, 1988.

1987

- [75] P. Comon, Y. Robert, and D. Trystram. Mise en oeuvre systolique de projections. *Traitement du Signal*, 4(1) :73–85, 1987.

1986

- [76] M. Cosnard, Y. Robert, and D. Trystram. Résolution parallèle de systèmes linéaires denses par diagonalisation. *Bulletin EDF, série C*, 2, 1986.

- [77] Y. Robert and D. Trystram. Un réseau systolique orthogonal pour le problème du chemin algébrique. *Comptes Rendus de l'Académie des Sciences, série 1*, 6, 1986.

# Summary

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
International peer reviewed journal [ACL]	0	3	3	3	3	1	3	1	3	1	6	3	4	3	7	1	4	1	3	1	3	2	1	6	1	67
National peer reviewed journal [ACLN]	2	1	2	2	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	10
<b>Total</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>77</b>