PUBLICATIONS

1 Articles acceptés ou parus dans des revues avec comité d’arbitrage

1. A. Kamgaing Kuiteing, P. Marcotte and G. Savard
   “Pricing and revenue maximization over a multicommodity transportation network: the nonlinear demand case”
   forthcoming in *Computational Optimization and Applications*

2. T. Dan and P. Marcotte
   “Competitive facility location with selfish users and queues”
   forthcoming in *Operations Research*

3. M. Carvalho, A. Lodi and P. Marcotte
   “A polynomial algorithm for a continuous bilevel knapsack problem”

4. M. Hosseinalifam, P. Marcotte and G. Savard
   “A new bid price approach to dynamic resource allocation in network revenue management”

5. A. Kamgaing Kuiteing, P. Marcotte and G. Savard
   “Network pricing of congestion-free networks: the elastic and linear demand case”
   *Transportation Science* 51 (2016) 791–806

6. S. Afsar, L. Brotcorne, P. Marcotte and G. Savard
   “Achieving an optimal trade-off between revenue and energy peak within a smart grid environment”
   *Renewable Energy* 91 (2016) 293–301

7. M. Hosseinalifam, G. Savard and P. Marcotte
   “Computing booking limits under a non-parametric demand model: A mathematical programming approach”

8. F. Gilbert, M. Anjos, P. Marcotte and G. Savard
   “Optimal design of bilateral contracts for energy procurement”

   “Network capacity control under a nonparametric demand choice model”

10. M. Nasri, F. Bastin and P. Marcotte
    “Quantifying the social welfare loss in moral hazard models”

11. S. Sharif Azadeh, P. Marcotte and G. Savard
    “A Non-Parametric Approach to Demand Forecasting in Revenue Management”

12. F. Gilbert, P. Marcotte and G. Savard
    “A numerical study of the logit network pricing problem”
    *Transportation Science* 43 (2015) 706–719
13. S. Sharif Azadeh, P. Marcotte and G. Savard
“A taxonomy of demand uncensoring methods in revenue management”

14. J. Guérin, P. Marcotte and G. Savard
“*L*^p* Approximation of Univariate Concave Functions”
*JOTA* **161** (2014) 490–505

15. F. Gilbert, P. Marcotte and G. Savard
“Logit network pricing”

16. F. Gilbert, P. Marcotte and G. Savard
“Mixed-logit network pricing”

17. S. Mirza Alizadeh, P. Marcotte and G. Savard
“Two-stage stochastic bilevel programming over a transportation network”

18. P. Marcotte, G. Savard and A. Schoeb
“A hybrid approach to the solution of a pricing model with continuous demand segmentation”

“Generating Efficient Solutions in Bilevel Multi-Objective Programming Problems”

20. L. Brotcorne, F. Cirinei, P. Marcotte and G. Savard
“A Tabu search algorithm for the network pricing problem”

21. L. Brotcorne, F. Cirinei, P. Marcotte and G. Savard
“An Exact Algorithm for the Network Pricing Problem”
*Discrete Optimization* **8** (2011) 246–258

22. C.O. Pieume, P. Marcotte, L.P. Fotso and P. Siarry
“Solving Bilevel Linear Multiobjective Programming Problems”

23. G. Heilporn, M. Labbé, P. Marcotte et G. Savard,
“Valid inequalities and Branch-and-Cut for the Clique Pricing Problem”

“A Polyhedral Study of the Network Pricing Problem with Connected Toll Arcs”

25. Y. Zhang, O. Berman, P. Marcotte and V. Verter
“A Bilevel Model for Preventive Healthcare Facility Network Design with Congestion”

“A Parallel Between Two Classes of Pricing Problems in Transportation and Economics”
27. P. Marcotte, A. Mercier, G. Savard and V. Verter
Transportation Science 43 (2009) 228–243

“Existence and computation of optimal tolls in multiclass network equilibrium problems”

29. P. Marcotte, G. Savard and D.L. Zhu
“Mathematical structure of a bilevel strategic pricing model”

30. L. Brotcorne, M. Labbé, P. Marcotte and G. Savard
“Joint Design and Pricing on a Network”

31. L. Brotcorne, G. Savard and P. Marcotte
“Bilevel Programming: The Montreal School”
INFOR 46 (2008) 231–246

32. S. Dewez, M. Labbé, P. Marcotte and G. Savard
“New formulations and valid inequalities for a bilevel pricing problem”

33. B. Colson, P. Marcotte and G. Savard
“An overview of bilevel optimization”

34. P. Marcotte and G. Savard
“A Bilevel Approach to Optimal Pricing”
Zurich Intelligencer (2007) 36–37

35. J. Guérin, P. Marcotte and G. Savard
“An optimal adaptive algorithm for the approximation of concave functions”

“A smoothing heuristic for a class of bilinear bilevel programs”

37. S. Roch, G. Savard and P. Marcotte
“An approximation algorithm for Stackelberg network pricing”
Networks 46 46 (2005) 57–67

38. B. Colson, P. Marcotte and G. Savard
“A trust-region method for nonlinear bilevel programming: algorithm and computational experience”
Computational Optimization and Applications 30 (2005) 211–227

39. B. Colson, P. Marcotte and G. Savard
“Bilevel programming: A survey”
4OR 3 (2005) 87–107

40. P. Marcotte, S. Nguyen and A. Schoeb
“A strategic model of traffic assignment in static capacitated networks”
41. P. Marcotte and L. Wynter
   “A new look at the multi-class network equilibrium problem”

42. P. Marcotte, G. Savard and F. Semet
   “A bilevel programming approach to the travelling salesman problem”

43. Y. Hamdouch, P. Marcotte and S. Nguyen
   “Capacitated transit assignment with loading priorities”

44. Y. Hamdouch, P. Marcotte and S. Nguyen
   “A strategic model for dynamic traffic assignment”

45. J.-P. Côté, P. Marcotte and G. Savard
   “A bilevel modeling approach to pricing and fare optimization in the airline industry”

46. P. Marcotte and D. Zhu
   “A cutting plane for quasimonotone variational inequalities”

47. L. Brotcorne, M. Labbé, P. Marcotte and G. Savard
   “A bilevel model and algorithm for a freight tariff setting problem”
   Transportation Science 35 (2001) 1–14

   “A trust region algorithm for nonlinear bilevel programming”

49. S. Dubuc, I. Kagabo and P. Marcotte
   “Trivial cases for the Kantorovitch problem”
   RAIRO Recherche Opérationnelle 34 (2000) 49–59

50. P. Marcotte and D. L. Zhu
   “On the existence of solutions to the dynamic user equilibrium problem”
   Transportation Science 34 (2000) 402–414

51. L. Brotcorne, M. Labbé, P. Marcotte and G. Savard
   “A bilevel model and algorithm for a freight tariff setting problem”
   Transportation Science 34 (2000) 289–302

52. J.-P. Crouzeix, P. Marcotte and Daoli Zhu
   “Conditions ensuring the applicability of cutting-plane methods for solving monotone variational inequalities”

   “Advances in the continuous dynamic network loading problem”
   Transportation Science 33 (1999) 341–353

54. S. Dubuc, I. Kagabo and P. Marcotte
   “A note on the uniqueness of solutions to the transportation problem”
   INFOR 37 (1999) 141–148
55. P. Marcotte and D. L. Zhu
   “Weak sharp solution of variational inequalities”

56. S.Q. Wu, Y. Chen and P. Marcotte
   “A cutting plane method for linear bilevel programs”
   Systems Sciences and Mathematical Sciences 2 (1998) 125–133

57. P. Marcotte and D. L. Zhu
   “Convergence properties of feasible descent algorithms for solving variational inequalities in Banach spaces”
   Computational Optimization and Applications 10 (1998) 36–49

58. M. Labbé, P. Marcotte and G. Savard
   “A bilevel model of taxation and its application to optimal highway pricing”

   “An analytic center cutting-plane method for pseudomonotone variational inequalities”

60. R. Séguin, J.-Y. Potvin, M. Gendreau, T. G. Crainic, and P. Marcotte
   “Real-time decision problems: An operational research perspective”

61. P. Marcotte and S.Q. Wu
   “Finding the strictly local and ε-global minimizers of concave minimization with linear constraints”

62. P. Marcotte and D. L. Zhu
   “Exact and inexact penalty methods for the generalized bilevel programming problem”
   Mathematical Programming A 74 (1996) 141–157

63. D. L. Zhu and P. Marcotte
   “Co-coercivity and its role in the convergence of iterative schemes for solving variational inequalities”
   SIAM Journal on Optimization 6 (1996) 714–726

64. M. Gendreau, P. Marcotte and G. Savard
   “A Hybrid tabu-ascent algorithm for the linear bilevel programming problem”

65. P. Marcotte and D. L. Zhu
   “Global convergence of descent processes for solving non strictly monotone variational inequalities”

   “Coupling the auxiliary problem principle with descent methods of pseudoconvex programming”

67. P. Marcotte and G. Savard
   “A new implicit enumeration scheme for the discriminant analysis problem”

68. M. Desrochers, P. Marcotte and M. Stan
   “The congested facility location problem”
   Location Science 3 (1995) 9–23
69. P. Marcotte and J. H. Wu
   “On the convergence of projection methods: Application to the decomposition of affine variational
   inequalities”

70. D. L. Zhu and P. Marcotte
   “New classes of generalized monotonicity”

71. J. H. Wu, M. Florian and P. Marcotte
   “Transit equilibrium assignment: A model and solution algorithms”

72. D. L. Zhu and P. Marcotte
   “An extended descent framework for monotone variational inequalities”
   *JOTA* **80** (1994) 353–369

73. J.E. Fernández, P. Marcotte, S. Mondschein, J. Vera and A. Weintraub
   “Solution approaches to the bus operator problem”

74. P. Marcotte and D. L. Zhu
   “Modified descent methods for solving monotone variational inequalities”

75. J. H. Wu, M. Florian and P. Marcotte
   “A general descent framework for the monotone variational inequality problem”

76. P. Marcotte and G. Marquis
   “Efficient implementation of heuristics for the continuous network design problem”

77. P. Marcotte, L. Zubieta and G. Marquis
   “A Newton-SOR method for solving the spatial price equilibrium problem”
   *Transportation Science* **26** (1992) 36–47

78. E. Fernández and P. Marcotte
   “Operators-Users Equilibrium Model in a Partially Regulated Transit System”
   *Transportation Science* **26** (1992) 93–105

79. P. Marcotte and Gilles Savard
   “Novel approaches to the discrimination problem”

80. P. Marcotte
   “Application of Khobotov’s algorithm to variational inequalities and network equilibrium problems”
   *INFOR* **29** (1991) 258–270

81. P. Marcotte and G. Savard
   “A note on the Pareto-optimality of solutions to the linear bilevel programming problem”

82. P. Marcotte, O. Drissi-Kaïtouni and L. Zubieta
   “Iterative methods for solving an equilibrium problem arising in transit deregulation”
83. P. Marcotte  
“To serve or not to serve: A badminton dilemma”  
SIAM Review 31 (1989) 303–305

84. P. Marcotte and J.-P. Dussault  
“A sequential linear programming algorithm for solving monotone variational inequalities”  
SIAM Journal on Control and Optimization 27 (1989) 1260–1278

85. J.-P. Dussault and P. Marcotte  
“Conditions de régularité géométrique pour les inéquations variationnelles”  
R.A.I.R.O. Recherche Opérationnelle 23 (1989) 1–16

86. P. Marcotte  
“A note on a bilevel programming algorithm by LeBlanc and Boyce”  

87. P. Marcotte and J. Guélat  
“Adaptation of a modified Newton method for solving the asymmetric traffic equilibrium problem”  
Transportation Science 22 (1988) 112–124

88. P. Marcotte  
“Un algorithme général de calcul de l’état d’équilibre d’un oligopole”  

89. P. Marcotte  
“Algorithms for the network oligopoly problem”  

90. P. Marcotte and J.-P. Dussault  
“A note on a globally convergent Newton method for solving monotone variational inequalities”  

91. P. Marcotte  
“A note on Khilnani and Tse USA algorithm”  

92. A. Haurie and P. Marcotte  
“A game theoretic approach to network equilibrium”  
Mathematical Programming Study 26 (1986) 252–255

93. P. Marcotte  
“Network design problem with congestion effects: A case of bilevel programming”  
Mathematical Programming 34 (1986) 142–162

94. J. Guélat and P. Marcotte  
“Some comments on Wolfe’s “Away Step””  
Mathematical Programming 35 (1986) 110–119

95. P. Marcotte  
“A new algorithm for solving variational inequalities, with application to the traffic assignment problem”  
Mathematical Programming 33 (1985) 339–351

96. A. Haurie and P. Marcotte  
“On the relationship between Nash-Cournot and Wardrop equilibria”  
NETWORKS 15 (1985) 295–308
2 Actes de conférences avec comité d’arbitrage

1. Y. Bengio, N. Le Roux, P. Vincent, O. Delalleau and P. Marcotte
“Convex Neural Networks”

2. M. Fortin, P. Marcotte and G. Savard
“Pricing a segmented market subject to congestion”
Proceedings of TRISTAN V (Triennial Symposium on Transportation Analysis) Le Gosier, Guadeloupe, July 13–18 2004

“A bilevel model for a network design and tariff setting problem”
Proceedings of TRISTAN V (Triennial Symposium on Transportation Analysis) Le Gosier, Guadeloupe, July 13–18 2004

4. P. Marcotte, S. Nguyen and K. Tanguay
“Implementation of an efficient algorithm for the multiclass traffic assignment problem”

5. P. Marcotte and D. L. Zhu
“An efficient algorithm for a bicriterion traffic assignment problem”
Proceedings of TRISTAN II (Triennial Symposium on Transportation Analysis) Capri, June 23–28 1994, 891–897

3 Chapitres de livre

1. P. Marcotte, A. Mercier., G. Savard et V. Verter
“Gestion du risque lié au transport des matières dangereuses : une approche basé sur la tarification”

2. P. Marcotte and M. Patriksson
“Traffic Equilibrium”

“Path-based Formulations of a Bilevel Toll Setting Problem”
4. P. Marcotte and G. Savard
   “Bilevel Programming: A combinatorial perspective”

5. P. Marcotte and G. Savard
   “A bilevel programming approach to Price Setting”

6. P. Marcotte and G. Savard

7. M. Labbé, P. Marcotte and G. Savard
   “On a class of bilevel programs”

8. P. Marcotte
   “Reformulations of a bicriterion equilibrium problem”

9. P. Marcotte and S. Nguyen
   “Hyperpath formulations of traffic assignment problems”

10. P. Marcotte and D. L. Zhu
    “Equilibria with infinitely many differentiated classes of customers”

11. P. Marcotte
    “Advantages and drawbacks of variational inequality formulations”

12. P. Marcotte and M. Blain
    “A Stackelberg-Nash model for the design of deregulated transit system”

4 Livres


2. P. Marcotte and S. Nguyen, eds.
   Equilibrium and Advanced Transportation Modelling
   Kluwer (1998)
5 Autres

1. P. Marcotte et F. Soumis  
   **Tous les chemins mènent aux maths**  
   Québec Science (2000)

2. P. Marcotte  
   Design optimal d’un réseau de transport en présence d’effets de congestion  
   Thèse de doctorat (Ph.D.), Université de Montréal (1981)

3. P. Marcotte  
   Application de la transformée de Laplace à l’interpolation par des sommes d’exponentielles  
   Mémorandum de maîtrise (M.Sc.), Université de Montréal (1975)

mise à jour: 17 août 2018