PUBLICATIONS

1 Articles à paraître

1. A. Kamgaing Kuiteing, P. Marcotte and G. Savard
   “Network pricing of congestion-free networks: the elastic and linear demand case”
   à paraître dans Transportation Science

2 Articles parus dans des revues avec comité d’arbitrage

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

2. M. Hosseinalifam, P. Marcotte and G. Savard
   “Network capacity control under a nonparametric demand choice model”

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

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

5. F. Gilbert, P. Marcotte and G. Savard
   “A numerical study of the logit network pricing problem”
   Transportation Science 43 (2015) 706–719

6. S. Sharif Azadeh, P. Marcotte and G. Savard
   “A taxonomy of demand uncensoring methods in revenue management”

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

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

9. F. Gilbert, P. Marcotte and G. Savard
   “Mixed-logit network pricing”
   Computational Optimization and Applications 57 (2014) 105–127

10. S. Mirza Alizadeh, P. Marcotte and G. Savard
    “Two-stage stochastic bilevel programming over a transportation network”
    Transportation Research B 58 (2013) 92–105

11. P. Marcotte, G. Savard and A. Schoeb
    “A hybrid approach to the solution of a pricing model with continuous demand segmentation”
    EURO Journal on Computational Optimization 1 (2013) 117–142
   “Generating Efficient Solutions in Bilevel Multi-Objective Programming Problems”

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

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

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

    Clique Pricing Problem”

17. G. Heilporn, M. Labbé, P. Marcotte and G. Savard
   “A Polyhedral Study of the Network Pricing Problem with Connected Toll Arcs”

18. Y. Zhang, O. Berman, P. Marcotte and V. Verter
   “A Bilevel Model for Preventive Healthcare Facility Network Design with Congestion”
   IIE Transactions 42 (2010) 865–880

19. G. Heilporn, P. Marcotte and G. Savard
   “A Parallel Between Two Classes of Pricing Problems in Transportation and Economics”

20. 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”

22. P. Marcotte, G. Savard and D.L. Zhu
   “Mathematical structure of a bilevel strategic pricing model”
   EJOR 193 (2009) 552–566

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

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

   “New formulations and valid inequalities for a bilevel pricing problem”
26. B. Colson, P. Marcotte and G. Savard
   “An overview of bilevel optimization”

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

28. 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”

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

31. 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

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

33. P. Marcotte, S. Nguyen and A. Schoeb
   “A strategic model of traffic assignment in static capacitated networks”

34. P. Marcotte and L. Wynter
   “A new look at the multi-class network equilibrium problem”

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

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

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

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

39. P. Marcotte and D. Zhu
   “A cutting plane for quasimonotone variational inequalities”
40. 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

41. P. Marcotte, G. Savard and D. L. Zhu
   “A trust region algorithm for nonlinear bilevel programming”

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

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

44. 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

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

46. Y.W. Xu, J.H., Wu, M. Florian and P. Marcotte
   “Advances in the continuous dynamic network loading problem”
   Transportation Science 33 (1999) 341–353

47. S. Dubuc, I. Kagabo and P. Marcotte
   “A note on the uniqueness of solutions to the transportation problem”
   INFOR 37 (1999) 141–148

48. P. Marcotte and D. L. Zhu
   “Weak sharp solution of variational inequalities”

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

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

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

52. J.-L. Goffin, P. Marcotte and D. L. Zhu
   “An analytic center cutting-plane method for pseudomonotone variational inequalities”

53. R. Séguin, J.-Y. Potvin, M. Gendreau, T. G. Crainic, and P. Marcotte
   “Real-time decision problems: An operational research perspective”
54. P. Marcotte and S.Q. Wu
   “Finding the strictly local and $\epsilon$-global minimizers of concave minimization with linear constraints”

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

56. 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

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

58. 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”

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

61. M. Desrochers, P. Marcotte and M. Stan
   “The congested facility location problem”
   Location Science 3 (1995) 9–23

62. P. Marcotte and J. H. Wu
   “On the convergence of projection methods: Application to the decomposition of affine variational inequalities”

63. D. L. Zhu and P. Marcotte
   “New classes of generalized monotonicity”
   JOTA 87 (1995) 457–471

64. J. H. Wu, M. Florian and P. Marcotte
   “Transit equilibrium assignment: A model and solution algorithms”
   Transportation Science 28 (1994) 193–203

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

66. J.E. Fernández, P. Marcotte, S. Mondschein, J. Vera and A. Weintraub
   “Solution approaches to the bus operator problem”
   Transportation Research B 27B (1993) 1–12

67. P. Marcotte and D. L. Zhu
   “Modified descent methods for solving monotone variational inequalities”
68. J. H. Wu, M. Florian and P. Marcotte
   “A general descent framework for the monotone variational inequality problem”
   Mathematical Programming A 61 (1993) 281–300

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

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

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

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

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

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

75. P. Marcotte, O. Drissi-Kaïtouni and L. Zubieta
   “Iterative methods for solving an equilibrium problem arising in transit deregulation”
   Transportation Research B 24B (1990) 45–55

76. P. Marcotte
   “To serve or not to serve: A badminton dilemma”
   SIAM Review 31 (1989) 303–305

77. 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

78. 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

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

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

81. P. Marcotte
   “Un algorithme général de calcul de l’état d’équilibre d’un oligopole”
82. P. Marcotte
   “Algorithms for the network oligopoly problem”

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

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

85. A. Haurie and P. Marcotte
   “A game theoretic approach to network equilibrium”

86. P. Marcotte
   “Network design problem with congestion effects: A case of bilevel
   programming”

87. J. Guélat and P. Marcotte
   “Some comments on Wolfe’s “Away Step”"

88. P. Marcotte
   “A new algorithm for solving variational inequalities, with application to the
   traffic assignment problem”

89. A. Haurie and P. Marcotte
   “On the relationship between Nash-Cournot and Wardrop equilibria”
   *NETWORKS* **15** (1985) 295–308

90. P. Marcotte
   “Quelques notes et résultats nouveaux sur le problème d’équilibre d’un
   oligopole”

91. P. Marcotte
   “Network optimization with continuous control parameters”

3 **Actes de conférences avec comité d’arbitrage**

1. Y. Bengio, N. Le Roux, P. Vincent, O. Delalleau and P. Marcotte
   “Convex Neural Networks”
   Advances in Neural Information Processing Systems (NIPS 2005), December 5–8 2005, Vancouver,
   British Columbia, Canada

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

4 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”]

5 Livres


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

6 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 transforme de Laplace l’interpolation par des sommes d’exponentielles
   Mmoire de matrise (M.Sc.), Université de Montréal (1975)