

ISOLDE V: FULLERTON, CALIFORNIA
June 7-12, 1990

Thursday a.m., session 1: Stochastic location problems I

CHAIR: F. Louveaux

- J.J. Van Dijk Heuristics and statistics in NP-complete problems.
- D. Simchi-Levi Hierarchical planning for probabilistic distribution systems. published as: Simchi-Levi, D. "Hierarchical design for probabilistic distribution systems in euclidean spaces," *Management Science* 38: 1992: 198-211.

Thursday a.m., session 2: Stochastic location problems II

CHAIR: F. Louveaux

- J.B.G. Frenk,
M. Labbé,
S. Zhang The stochastic k-priority queue location problem and related results. not published, except in PhD dissertation of S. Zhang: "Stochastic queue location problems," Tinbergen Institute Series 14, Thesis publisher, Amsterdam, 1991.
- G. Laporte,
F. Louveaux,
L. Vanhamme An exact branch and bound procedure for stochastic location problems. published as: Laporte, G.; Louveaux, F.; Vanhamme, L. "Exact solution of a stochastic location problem by an integer ℓ -shaped algorithm," *Transportation Science* 28: 1994, 95-103.

Thursday p.m., session 1: Applications I

CHAIR: T.L. Friesz

- S. Singh An optimisation towards spatio-functional decentralisation and area development. published as: Singh, S. "An optimisation towards spatio-functional decentralisation and area development," *Indian journal of Regional Science* XXIV(2): 1992, 53-63.
- W. Domschke,
S. Voss Simultaneous location and production planning with side-constraints. published as: Domschke, W.; Voss, S. "Ansätze zur strategischen Standort - und Produktionsplanung - ein Anwendungsbeispiel," in K.-P. Kistner, J.H. Ahrens, G. Feichtinger, J. Minnemann and L. Streitferdt (eds.) *Operations Research Proceedings 1989*. Berlin: Springer, pp87-94.
- M. Kuby,
T. Friesz A mixed-integer programming model for analyzing China's coal shortage. published as: Kuby, M.; Neuman, ?.; Zhang, ?.; Cook, ?.; Zhou, ?.; Friesz, T.; Shi, ?.; Gao, ?.; Watanatada, ?.; Cao, ?.; Sun, ?.; Xie, ?. "A strategic investment planning model for China's coal and electricity delivery system," *Energy* 18: 1993, 1-24.

E.L. Hillsman,
J. Ray,
C. Liu

Locating power supply facilities to introduce electricity service into a territory.

Thursday p.m., session 2: Facility location on networks I

CHAIR: L. Hakimi

D. Chhajed,
T.J. Lowe

M-median and m-center problems with mutual communication: solvable special cases. published as: Chhajed, D.; Lowe, T.J. "Locating facilities which interact: some solvable cases," *Annals of Operations Research* 40: 1992, 101-124.

P. Slater

On structural results for sequences of central sets in a graph.

S.L. Hakimi,
E.F. Schmeichel,
M. Labbé

On locating path- or tree-shaped facilities on networks. published as: Hakimi, S.L.; Schmeichel, E.F.; Labbé, M. "On locating path- or tree-shaped facilities on networks," *Networks* 23: 1993, 543-555.

Friday a.m., session 1: Competitive location problems I

CHAIR: S.Chiu

S. Chiu,
M. Brandeau

Competitive location problems in a user-optimizing environment. published as: Chiu, S.; Brandeau, M. "Location of competing private facilities in a user-optimizing environment with market externalities," *Transportation Science* 28: 1994,125-140 and Chiu, S.; Brandeau, M.; Kumar, ?.; Grossman, ? "Location with market externalities," in *Facility Location: A Survey of Applications and Methods*, Drezner, Z.; Springer, ?, Eds. publisher, place 1995, pages and Chiu, S.; Brandeau, M. "Facility location in a user-optimization environment with market externalities: analysis of customer equilibria and optimal public facility location," *Location Science* 2: 1994, 129-147.

T. Miller,
R.L. Tobin,
T.L. Friesz

Network facility location models in Stackleberg-Nash-Cournot spatial competition. published as: Miller, T.; Tobin, R.L.; Friesz, T.L. "Network facility location models in Stackleberg-Nash-Cournot spatial competition," *Papers in Regional Science: The Journal of the RSAI* 71(3): 1992.

M. Labbé,
S.L. Hakimi

Market and locational equilibrium for two competitors. published as: Labbé, M.; Hakimi, S.L. "Market and locational equilibrium for two competitors," *Annals Operations Research* 39: 1991, 749-756.

Friday a.m., session 2: Competitive location problems II

CHAIR: S. Chiu

- A. Suzuki A competitive location problem in the Euclidean plane. published as:
Suzuki, A. "A competitive location problem in the Euclidean plane,"
Nanzan Management Review 7: 1993, 431-455.
- P. Hansen,
D. Peeters,
J.F. Thisse Facility location under zonal pricing.
- J.C. Thill Demand sensitivity to space-price competition with Manhattan and
Euclidean distance metrics. published as: Thill, J.C.; Rushton, G.
"Demand sensitivity to space-price competition with Manhattan and
Euclidean representations of distance," *Annals of Operations
Research* 40: 1992, 381-401.

Friday p.m., session 1: Multiobjective location models I

CHAIR: H.A. Eiselt

- H.A. Eiselt Network location with minimax and maximin objective. published as:
Eiselt, H.A. "Hotelling's duopoly on a tree," *Annals of Operations
Research* 40: 1992, 195-207.
- E. Erkut,
S. Neuman A multiobjective model for locating undesirable facilities. published
as: Erkut, E.; Neuman, S. "A multiobjective model for locating
undesirable facilities," *Annals of Operations Research* 40: 1992, 209-
227.
- M.J. Hodgson,
S.K. Jacobsen Comparison of a gravity and an expected distance hierarchical
location-allocation model.

Friday p.m., session 2: Network design

CHAIR: O. Berman

- O. Berman,
A. Odoni Improving the location of minisum facilities through network
modification. published as: Berman, O.; Ingco, D.I.; Odoni, A.R.
"Improving the location of minisum facilities through network
modification," *Annals of Operations Research* 40: 1992, 1-16.
- J.G. Klincewicz Avoiding local optima in the p-hub location problem using tabu search
and GRASP. published as: Klincewicz, J.G. "Avoiding local optima in
the p-hub location problem using tabu search and GRASP," *Annals of
Operations Research* 40: 1992, 283-302.
- J. Current,
D. Schilling The median tour and maximal covering tour problems. published as:
Current, J.; Schilling, D. "The median tour and maximal covering tour

problems: formulations and heuristics,” *European Journal of Operational Research* 73: 1994, 114-126.

J.H. Kuiper,
J.H.P. Paelinck,
K.E. Rosing

Location allocation in the study of theoretical space. published as: Kuiper, J.H.; Paelinck, J.H.P.; Rosing, K.E. “Flux de transports dans un système Tinbergen-Bos Métrisé,” *Revue d’Economie Régionale et Urbaine* 13: 1991, 281-287.

Monday a.m., session 1: Stochastic location problems III

CHAIR: M. Labbé

V. Marianov,
C. ReVelle

A probabilistic fire protection siting model with joint reliability requirements. published as: Marianov, V.; ReVelle, C. “A probabilistic fire protection siting model with joint reliability,” *Papers in Regional Science, The Journal of RSAI* 73: 1992, 217-241.

S. Prasad,
R. Batta

Efficient facility locations on a network operating as an M/G/1 queue. published as: Prasad, S.; Batta., R. “Efficient facility locations on a tree network operating as a FIFO M/G/1 queue,” *Networks* 23: 1993, 597-603.

J.B.G. Frenk,
M. Labbé,
R.J. Visscher,
S.Z. Zhang

The stochastic queue location problem in the plane. not published except in doctoral thesis of S. Zhang, “Stochastic queue location problems,” Tinbergen Institute Series 14, Thesis Publisher, Amsterdam, 1991..

Monday a.m., session 2: Applications II

CHAIR: R.L. Church

R.L. Church,
M.F. Goodchild

Database system design and placement for geographical information systems.

J. Martinich

Dynamic production-location models using activity analysis.

R.L. Francis

Evaluating proposed locations for vehicle exhaust emission inspection stations in Florida: an application.

Monday p.m., session 1: Facility location on networks II

CHAIR: T. Lowe

M.J. Hodgson,
K.E. Rosing

A network location-allocation model trading off flow capturing and p-median objectives. published as: Hodgson, M.J.; Rosing, K.E. “A network location-allocation model trading off flow capturing and p-median objectives,” *Annals of Operations Research* 40: 1992, 247-260.

J.R Weaver,
R.L. Church A median location model which allows nonclosest unit service and multiple service units at a site.

M. Koerkel The simple plant location problem - revisited. not published.

Monday p.m., session 2: Facility location on networks III

CHAIR: T. Lowe

Y. Xu,
R.L. Francis,
T.J. Lowe The multimedian location problem on a network: exploiting block structure. published as: Xu, Y.; Francis, R.L.; Lowe, T.J. "The multimedian location problem on a network: exploiting block structure," *Transportation Science* 28: 1994, 116-124.

R.D. Galvao,
E.D.R.S. Gonzales A lagrangean heuristic for the p_k -median dynamic location problem. did not present, but the paper was published as: Galvao, R.D.; Gonzales, E.D.R.S. "A lagrangean heuristic for the p_k -median dynamic location problem," *European Journal of Operational Research* 58: 1992: 250-262.

W.J. Hopp,
M.S. Daskin,
B. Medina Forecast horizons and dynamic facility location planning. published as: Daskin, M.S.; Hopp, W.J.; Medina, B. "Forecast horizons and dynamic facility location planning," *Annals of Operations Research* 40: 1992, 125-151.

Tuesday a.m., session 1: Location problems on the plane I

CHAIR: Z. Drezner

I. Bongartz,
P.H. Calamai,
A.R. Conn A projection-relaxation method for a location-allocation problem. published as: Bongartz, I.; Calamai, P.H.; Conn, A.R. "A projection for ℓ_p norm location-allocation problems," *Mathematical Programming* 66: 1994, 283-312.

H. Juel,
R.F. Love The dual of a generalized minimax location problem with limited distances. published as: Juel, H.; Love, R.F. "The dual of a generalized minimax location problem," *Annals of Operations Research* 40: 1992, 261-264.

Z. Drezner,
A. Mehrez,
G.O. Wesolowsky The facility location problem with limited distances. published as: Drezner, Z.; Mehrez, A.; Wesolowsky, G.O. "The facility location problem with limited distances," *Transportation Science* 25: 1991, 183-187.

Tuesday a.m., session 2: Location problems on the plane II

CHAIR: Z. Drezner

- M.E. O’Kelly A clustering approach to the planar hub location. published as:
O’Kelly, M.E. “A clustering approach to the planar hub location,”
Annals of Operations Research 40: 1992, 339-353.
- F. Plastria The Euclidean p-center sum problem. did not present; presented instead
at EWGLA-Chios, 1989.
- K.E. Rosing Solutions to the multi-Weber problem on the Euclidean norm via the
rectilinear norm.

Tuesday p.m., session 1: Obnoxious location problems

CHAIR: A. Tamir

- A. Tamir Obnoxious facility location on graphs. published as: Tamir, A.
“Obnoxious facility location on graphs,” *SIAM Journal on Discrete
Mathematics* 4: 1991, 550-567.
- C.M. Klein,
R.K. Kincaid Analysis of discrete obnoxious location problems. published as: Klein,
C.M.; Kincaid, R.K. “The discreet anti-p-center problem,”
Transportation Science 28: 1994, 77-79.
- J. Karkazis,
T.B. Boffey A branch-and-bound algorithm for the location of obnoxious facilities
causing atmospheric pollution. did not present.

Tuesday p.m., session 2: Multiobjective location models II

CHAIR: J. Current

- U.S. Pelakar,
C.L. Stowers Bilevel models for siting and routing hazardous materials.
- R.L. Church,
J. Current The minimal cost/maximal covering forest problem on a tree.

also:

J. Campbell. “Location and allocation for distribution systems with transshipments and transportation economies of scale,” *Annals of Operations Research* 40: 1992, 77-99.