

curriculum vitae

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Contents

1 Curriculum Vitae

1.1 Personal

1944, January 1 born in Muntendam, the Netherlands, in a family of farmers.

Citizenship Dutch.

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1.2 Educational

1956-1961 high school (HBS-B, Winkler Prins Lyceum, Veendam).

1964, Nov. 24 B.Sc.-degree ('candidaatsexamen') in Mathematics, Physics and Astronomy, University of Groningen.

1968, Febr. 13 M.Sc.-degree ('doctoraalexamen') in Applied Mathematics with minors in Pure Mathematics and Mechanics (with honors), University of Groningen.

1971, Sept. 9 Ph.D.-degree, University of Groningen (with honors). Title dissertation: 'On the time optimal bang-bang control of linear multivariable systems with small initial perturbations'. Advisor: Prof. Dr. J.A. Sparenberg.

1992 Attended management courses (Strategy and structure in a university setting – J.P.Brunet, March 23; VSNU seminar onderzoeksmangement, April 5-8)

1994, August Intensive course French (at Ceran, Spa, Belgium).

1995,1996 Participant in Human Resources Management course (6 times 3 days).

1.3 Work Experience

- 1965 Part-time teacher at an agricultural college, Groningen.
- 1967-1968 Student-assistent, University of Groningen.
- 1968-1971 ‘Wetenschappelijk medewerker’ (American equiv.:assistant professor) Department of Mathematics, University of Groningen.
- 1968-1970 Part-time teacher at an architectural college, Groningen.
- 1970 Consultant Hollandse Signaalapparaten (a subsidiary of Philips), Hengelo, the Netherlands.
- 1971-1982 ‘wetensch. medewerker’ and ‘wetensch. medewerker eerste klas’ (American equiv.: assistant professor), ‘wetensch. hoofdmedewerker’ (American equiv.: associate professor), Twente University of Technology. From April 1, 1981 till the end on August 31, 1982 part-time (60%).
- 1972-1973 Sabbatical Leave. Postdoctoral fellow, Department of Aeronautics and Astronautics, Stanford University, USA.
- 1979-1980 Sabbatical Leave. Research Associate, Division of Applied Sciences, Harvard University, USA.
- 1981-1983 Member SEAT-group at Hollandse Signaalapparaten (currently part of Thales). From the beginning on April 1st till August 31, 1982 part-time (40%).
- 1983, Sept. 1-onwards. Professor of Mathematical System Theory, Delft University of Technology (chair consists of two scientific staff with tenure, a secretary and a number of Ph.D.-students).
- 1984-1998 Consultant National Aerospace Laboratory, Amsterdam.
- 1984-1986 Consultant Hollandse Signaalapparaten, Hengelo.
- 1984, Summer Visiting professor University of Southern California, Los Angeles.
- 1986, Summer Visiting professor Northeast University of Technology, Shenyang, People’s Republic of China.
- 1988-1992 Consultant Royal Dutch/Shell (KSLA), Amsterdam.
- 1989, Summer Maître de Recherche Associé, École des Mines de Paris, Fontainebleau.
- 1990, Summer Visiting scholar at Univ. of California in Berkeley, Dept. of Mechanical Engineering.
- 1992-1993 Sabbatical leave. Visiting professor, Institut National de Recherche en Informatique et en Automatique (INRIA), Sophia Antipolis, France. Bourse du CIES.
- 1996-2001 Network coordinator of ‘Alapedes’, a TMR project funded by the European Union (total amount involved 1817 kEuro).
- 1999-2005 Deputy vice-chancellor of Delft University of Technology (except for the period Nov. 1, 2002 – June 30, 2003).
- 2002-2003 Sabbatical leave. Visiting CNRS professor Université de Nice/INRIA, France.

1.4 Research Interests

Optimal Control and System theory, zero-sum and nonzero-sum differential games, filtering theory, applications to both engineering and economics, algorithms for control and filtering. Discrete event dynamic systems, financial engineering.

1.5 Languages Spoken

Dutch (fluent), English, German (near native), French (working knowledge).

1.6 Awards and Scholarships

- 1968 M.Sc.-degree with honors.
- 1971 Ph.D.-degree with honors.
- 1972-1973 ZWO-scholarship to study at Stanford Univ. for one year.
- 1984 US-Air Force grant to visit the USA.
- 1986 ZWO-grant to visit China.
- 1989 Invitation Polish Academy of Sciences.
- 1989 Entry in Marquis Who's Who in the World, 9th and 10th edition, 1989-1991.

1.7 Contract Research

- 1988-1992 Project no. DWI77.1397 with the STW (Dutch Technology Foundation) on 'Adaptive Predictive Control of Diffusion Furnaces and Low Pressure Chemical Vapour Deposition reactors'. Dr. W.L. de Koning is initiator and daily advisor. Full support for one Ph.D. student.
- 1990-1994 'Lucifer'-project with Philips Aachen. Full support for one Ph.D. student. Total budget Dfl. 310,000.
- 1995-1999 Ph.D. project (via NUFFIC) within the framework of the collaboration with Indonesia.
- 1996-2000 Project no. DTN44.3517 with the STW on 'The construction and control of 3D calibrated scanning probe microscopes'. Jointly with the Faculty of Applied Physics. Dr. W.L. de Koning is initiator and daily advisor. Full support for one Ph.D. student.
- 1996-1997 Rijkswaterstaat, Adviesdienst Verkeer en Vervoer. Project- code BPIS 93.254. Joint contract with Faculty of Civil Engg. Total budget Dfl. 116,541.
- 1996-2001 Network coordinator of TMR network contract no. ERBFMRXTCT960074 (European Commission, directorate general XII). Total budget 1,817 kEuro. Full support for four post-doc years.
- 1997-onwards Projectleader within the DIOC project 'Seamless Multimodal Mobility'. Budget own project Dfl. 720,000. Full support for two Ph.D. students.
- 1997-2001 Contract (jointly with the section 'traffic and transport' of the faculty of Civil Engineering) with Railned, Utrecht. Full support for one Ph.D. student.
- 1997-1998 RABO-bank (jointly with prof. Heemink)
- 1998-2000 SWON (gebiedsbestuur der exacte wetenschappen) Research on financial derivatives (jointly with prof. Heemink).

1.8 Patents

2 Technical Affiliations

2.1 Memberships

- 1973-onwards Member of the 'KIVI', the Royal Dutch Engineering Society.
- 1975-onwards Member of the mathematics of control committee of IFAC (International federation of Automatic Control).
- 1977-onwards Member of the 'Wiskundig Genootschap', the Dutch Mathematical Society.
- 1980-onwards Member of the working group 'Mathematische beslistkunde en systeemtheorie' of the foundation Mathematical Centre, Amsterdam.

- 1981-onwards Member of the working group ‘regeltheorie’ of the foundation ‘Meet- en besturingstechnologie’.
- 1981-1983 Member world university (Walter Isard).
- 1985-2002 Member of the IEEE.
- 1986-1990 Member of the board of the foundation ‘Meet- en besturingstechnologie’.
- 1990-onwards Member of the executive board of the International Society of Dynamic Games.

2.2 (International) Program Committees

- 1975 Secretary of the 10th Dutch mathematical congress, Enschede.
- 1976 Member organization committee 2nd Kingston conference on differential games and control theory.
- 1976-1977 Member IPC (International Program Committee) and chairman local organizing committee of the workshop on differential games and applications, Twente University of Technology, March 17-25, 1977.
- 1978 Chairman special interest session on differential games and multicriteria problems at the 7th IFAC triennial world congress, Helsinki.
- 1980 Member IPC of the workshop on game problems in dynamic systems control, Sochi, USSR, April 16-20, 1980.
- 1981 Member IPC of the IFAC 8th triennial world congress, Kyoto, Japan, August 24-28, 1981.
- 1984 Member IPC of the IFAC 9th triennial world congress, Budapest, July 2-6, 1984.
- 1985 Member IPC IFAC workshop on games, Alma Ata, USSR.
- 1986 Member IPC IFAC workshop on stochastic processes, Vilnius, USSR.
- 1986 Chairman IPC IFAC workshop on modelling, decisions and games: with applications to social phenomena, Beijing, China, August 1986.
- 1986 Member IPC IFAC/IFORS symposium on large scale systems: theory and applications, August 26-29, 1986, Zurich, Switzerland.
- 1987 Member IPC 10th IFAC triennial world congress, Munchen, Germany, July 1987.
- 1990 Organiser of the sessions on discrete event systems at the 11th IFAC triennial world congress, Tallin, USSR, August 13-17, 1990.
- 1990 Member IPC of the fourth international symposium on differential games and applications, August 9-10, 1990, Espoo, Finland.
- 1991 Member IPC IFAC symposium on design methods of control systems, Zurich, Switzerland, Sept. 4-6, 1991.
- 1991, July 2-5 member international organizing committee of the European Control Conference, Grenoble, France.
- 1991, June 18-20 member IPC of the IFAC workshop on Discrete event system theory and applications in manufacturing and social phenomena, Shenyang, China (I could not accept invitation to become chairman of the IPC).
- 1992, June 24-26 vice-chairman IPC of the IFAC workshop on Support systems for decision and negotiation processes, Warsaw, Poland.
- 1992, April 22,23 chairman 28-th Dutch Mathematical Congress, Delft.
- 1992, July 15-17 member IPC of the fifth international symposium on differential games and applications, Geneva.

- 1993, June 7-11 Member organizing committee Belgian-French-Netherlands' Summerschool on Discrete Event Systems, Spa, Belgium.
- 1993, June 29-July 2 member IPC second European control conference, Groningen.
- 1993, July 19-23 IFAC world congress, Sydney, chairman target session on discrete event control systems.
- 1994, June 15-17 Member organizing committee INRIA Conference on Analysis and Optimization, Nice, France.
- 1994, July 11-15 Chairman IPC of the sixth International Symposium on Dynamic Games and Applications, St Jovite, Canada.
- 1995, Sept. 5-8 Organizer minicourse on discrete events at the 3rd European Control Conference, Rome.
- 1996, July 7-10 Member IPC of symposium on 'discrete events and manufacturing systems', Lille, France.
- 1996, June 30 - July 5 member of international program subcommittee on the Symposium on Systems and Signals, 13th IFAC world congress, San Francisco.
- 1996, August 19-21 member IPC 3rd workshop on DES, Edinburgh.
- 1996, December 16-18 member IPC 7th international symposium on dynamic games and applications, Shonan Village Center, Kanagawa, Japan.
- 1997, June 25 Organization 'financial mathematics day' in Delft.
- 1998, June 17-20 member IPC of the IFAC international Workshop on nonsmooth and discontinuous problems of control and optimization, Chelyabinsk, Russia.
- 1998, July 8-10 IFAC conference on System, Structure and Control, Nantes, France. Member IPC.
- 1998, August 26-28 4th International Workshop on Discrete Event Systems (WODES'98), Cagliari, Italy. Member IPC.
- 1999, August 31-Sept. 3 European Control Conference, Karlsruhe, Germany. Member IPC.
- 2000, December 18-21 International symposium on dynamic games and applications, Adelaide.
- 2001, August 27-29 Workshop on Max-Plus Algebras, Prague.
- 2002, July 8-11 International Symposium on Dynamic Games and Applications, St.-Petersburg, Russia.
- 2002, October 2-4 6th workshop on discrete event systems, Zaragoza, Spain.
- 2004, Sept. 22-24 WODES'04, Reims, France.

2.3 Editorial Boards

- 1990-onwards Member editorial board of the Journal on DEDS: Theory and Applications, Kluwer Academic Publishers, New York.
- 1990-2002 Member editorial board of the Journal on Dynamics and Control, Kluwer Academic Publishers, New York. In 2002 this journal has been merged with the Journal of Dynamical and Control Systems. The name of the merged journal is Journal of Dynamical and Control Systems and its publisher is Kluwer Academic/Plenum Publishers (London).
- 1992-onwards Member editorial board of the Annals of the International Society of Dynamic Games, Birkhauser, Basel.
- 1994 Associate editor of Volume 1 of the Annals of the International Society of Dynamic Games, Advances in Dynamic Games and Applications (T. Başar, A. Haurie, eds), Birkhauser, 1994.
- 1993-onwards Editor the International Yearbook of Game Theory and Applications series, Russian Academy of Sciences, Nauka, Novosibirsk.

- 1987-1994 Member scientific board of the Encyclopedia of Mathematics (10 volumes), Kluwer, Dordrecht.
- 1994-1999 Associate editor of the European Journal of Control (published by Springer).
- 1996-onwards Member editorial board of Environmental Modelling and Assessment (EMA), Baltzer Science Publishers, Amsterdam.
 - 1998 Associate editor of Volume 5 of the Annals of the International Society of Dynamic Games (J. Filar, ed.), Birkhauser, 1998.
- 1998-onwards Member editorial board of the International Game Theory Review (published by World Scientific).
- 1999-onwards Member editorial board Trail Studies in Transport Series, Delft University of Technology.
- 1999-onwards Member editorial councils of Delft Integraal and Delft Outlook.
 - 2002 Editor "Delfts Goud, het leven en werk van 18 markante hoogleraren".

2.4 Reviewing and Refereeing

- Mathematical reviews.
- Zentrallblatt für Mathematik.
- Journal of Optimization Theory and Applications.
- IEEE Transactions on Automatic Control.
- Automatica.
- Journal of the Franklin institute.
- Optimal Control Applications and Methods.
- Mededelingen van het Wiskundig Genootschap.
- International Journal of Control.
- Journal of Economics and Control.
- Large Scale Systems.
- Applied mathematical Modelling.
- Naval Logistics Quarterly.
- National Science Foundation.
- International Science Foundation.
- Acta Applicandae Mathematicae.
- European Journal of Operations Research.
- Control-Theory and Advanced Technology.
- Systems and control letters.
- Operations Research.
- SIAM Journal on Control and Optimization.
- Structural Change and Economic Dynamics.
- Applied Mathematics and Computer Science.
- Mathematics of Operations Research.
- The American Mathematical Monthly
- Simulation Practice and Theory
- International Transactions in Operations Research
- Annals of the International Society of Dynamic Games.

2.5 Organizational functions within own Institution

- 1975-1976 Chairman Colloquium committee, Twente Univ. of Techn., Dept. of Mathematics.
- 1975-1976 Representative of Twente Univ. of Techn. at the ‘vertrouwenscommissie van het Wiskundig Genootschap’.
- 1977-1980 Member ‘vakgroepsbestuur’, Twente Univ. of Techn.
- 1978-1982 Head projectgroup on ‘Beslissingsproblemen met meervoudige criteria’, Twente Univ. of Techn.
 - 1980 Preparation and Organisation of the postdoctoral course on ‘Dynamic game Theory’, Dec. 8-10.
- 1984-onwards Member ‘dagelijks bestuur van de vakgroep toegepaste analyse’ (about 40 scientific staff), Delft Univ. of Techn., from 1987-1990, 1992-present chairman. Name ‘vakgroep’ changed into ‘werkeenhed’ as of 1998.
 - 1985-1987 Council member (‘faculteitsraad’) of the dept. of Techn. Mathematics and Informatics, Delft Univ. of Techn.
 - 1986-1990 Member of the ‘aio’-committee, dept. of Techn. Math. and Informatics, Delft (judgment of potential Ph.D. candidates).
- 1988-onwards Member ‘dagelijks bestuur van de ontwerpersopleiding Wiskundige beheers- en beleidsmodellen’.
- 1995-onwards Stand-in vice-chancellor of Delft University of Technology for presiding promotion sessions.
 - 1995-1998 Member Nectar (Neural and Expert Control of Aircraft) project.
- 1997-onwards Member programme committee of the ‘onderzoekschool Trail’ (Transport, Infrastructuur en Logistiek).
- 1997-onwards Project director ARTD research programme (‘programma leiderschap’) on ‘Seamless Multimodal Mobility’.
 - 1998-1999 Member BTA (commissie Begeleiding Toepassing Allocatie- systeem), TUD.
 - 1998-1999 Chairman ‘profielchetscommissie regeltechniek’ of the faculty ITS of TUD.
 - 1998-1999 Projectleader of the department of ‘Control, Risk, Optimization, Systems and Stochastics’ (CROSS) (85 persons).
- 1999-onwards Member of the Board for Doctorates, TUD.
 - 1999 Member ‘Verkenningcommissie regeltechniek’ of the faculty ITS.
 - 2000 Member ‘Benoemingsadviescommissie regeltechniek’ of the faculty ITS.
- 1999-onwards Chairman committee on Technostarters.
- 1999-onwards Chairman committee on Research Fellows.
- 1999-onwards Chairman committee on Gastdocenten.
- 1999-onwards Chairman ‘VSB-beurzen’-committee.
- 1999-onwards Chairman KNAW-fellows committee TUDelft.
- 2000-onwards President International Visitors’ Foundation.
 - 2000-2002 Vice-chm lustrum committee TUD-dies 2002.
 - 2001 Member ‘profielchetscommissie statistiek’ of the faculty ITS.
 - 2001-2002 Chairman projectgroup B.Sc./M.Sc. (“Bama”).

2.6 Organizational functions outside own Institution (apart from participation in program committees; for the latter see subsection 2.2)

- 1972 Member project group ‘Global dynamics’, coordination with Prof. O. Rademaker, Eindhoven University of Technology.
- 1978-1981 and 1984-1987 Vice-chairman and during 1981-1984 chairman of the mathematics of control committee of IFAC.
- 1985-1987 Board member of the working group ‘Mathematical besliskunde en systeemtheorie’ of the foundation Mathematical Centre, Amsterdam.
- 1985-1989 Member national committee on Mathematics and industry.
- 1985-1987 Member advisory committee of the project ‘Meetstrategie voor de praktische beoordeling van lucht op de werkplek’, hoofdgroep maatsch. technologie of the TNO (org. voor toegep. natuurwetensch. onderzoek).
- 1986-1990 Chairman of the working group ‘regeltheorie’ of the foundation ‘Meet- en besturingstechnologie’.
- 1986-1988 Member advisory committee of the project ‘ontwikkeling meetstrategieën in de ijzeren staalindustrie’, hoofdgroep maatsch. technologie of the TNO.
- 1987-1990 Member Policy Committee IFAC.
- 1987-1993 Member advisory committee of the department ‘besliskunde, statistiek en systeemtheorie’ of the Mathematical Centre, Amsterdam.
- 1987-onwards Member national network on systems- and controltheory (courses for graduate students). From 1990-1992 treasurer of the board.
- 1989-1999 Member of the ‘subcommissie Wiskunde en Informatica van de wetenschappelijke commissie NLR-NIVR’.
- 1990 Chairman committee ‘KIVI regeltechniekprijs 1989’
- 1993-1996 Member ‘voorbereidingscommissie onderzoekschool systeem- theorie en regeltechniek’.
- 1993-1996 Chairman Technical Committee DEDES of IFAC.
- 1994 member ‘Jury’ of the Foundation Technical Sciences (STW).
- 1995, Sept. 5-8 European Control Conference, Rome. Organizer minicourse on discrete event dynamic systems.
- 1995-onwards Member and ‘afdelingshoofd’ of the management team of the Dutch Institute of Systems and Control.
- 1996,1998 Lid jury van de Steven Hoogendijkprijs.
- 1996-1999 Council member of IFAC.

2.7 Member of Ph.D.-committees

- 1983 J.H. de Vlieger, Mathematical programming methods in optimal control, Dept. of Electr. Eng., Delft Univ. of Techn.
- 1984 A.J. de Zeeuw, Economic Applications of difference games, Catholic Univ. of Tilburg.
- 1984 Mrs. O. Tomography, dept. of techn. Math. and Inf., Delft.
- 1986 J. van Breugel, Optimization and control of biochemical processes using mechanistic mathematical models, Delft Univ. of Techn.
- 1986 B. Hanzon, Identifiability, recursive identification and spaces of linear dynamical systems, Erasmus Univ., Rotterdam.

- 1987 K.P. Machielsen, Numerical solution of optimal control problems with state constraints by sequential quadratic programming in function space, Eindhoven Univ. of Techn.
- 1987 H.J. Dane, Climate control of incubators related to growth and thermoregulation of newborn infants, Delft Univ. of Techn.
- 1987 P.G.M. van der Klugt, Rudder roll stabilization, Delft Univ. of Techn.
- 1987 F.C. van Geer, Applications of Kalman filtering in the analysis and design of ground-water monitoring networks, Delft Univ. of Techn.
- 1988 A. de Baas, Some properties of the Langevin model for dispersion, Delft Univ. of Techn.
- 1988 E. van Imhoff, Optimal economic growth and nonstable population, Erasmus Univ., Rotterdam.
- 1988 J.C. Engwerda, Regulation of linear discrete time-varying systems, Eindhoven Univ. of Techn.
- 1988 F. van der Rhee, Fuzzy modelling and control based on cell structures, Dept. of Electr. Eng., Delft Univ. of Techn.
- 1989 R. Smedinga, Control of discrete events, Univ. of Groningen.
- 1989 K. Jainandunsing, Parallel algorithms for solving systems of linear equations and their mappings on systolic arrays, Delft Univ. of Techn.
- 1989 H. Hagiwara, Ship routing under stochastic weather conditions, Delft Univ. of Techn.
- 1989 M. Steinbuch, Dynamic modelling and robust control of a wind energy conversion system, Delft Univ. of Techn.
- 1989 A.H.W. Geerts, Structure of linear-quadratic control, Eindhoven Univ. of Techn.
- 1990 P. Rocha, Structure and representation of 2-D systems, Univ. of Groningen.
- 1990 H. Butler, Model reference adaptive control, Delft Univ. of Techn.
- 1991 R.C.A. Zandbergen, Satellite altimeter data processing, Delft Univ. of Techn.
- 1991 P. Heuberger, On approximate system identification with system based orthonormal functions, Delft Univ. of Techn.
- 1991 R.T.J.M. van der Heijden, State estimation and error diagnosis for biotechnical processes. Delft Univ. of Techn.
- 1992 P. Visser, The use of satellites in gravity field determination and model adjustment. Delft Univ. of Techn.
- 1992 S. Gaubert, Théorie des systèmes lineaires dans les dioides, Ecole Nationale Supérieure des Mines de Paris/INRIA, France.
- 1993 A.J.M. Jacobs, Timespan minimization for storm surge barrier control, University of Utrecht.
- 1994 J.S. Luo, Stability and performance robustness analysis and design of automatic control systems, Delft Univ. of Techn.
- 1994 B. Gaujal, Parallelisme et simulation des systèmes a evenements discrets, Université de Nice-Sophia Antipolis (comme rapporteur).
- 1994 A. Rapaport, Contribution à la théorie des jeux différentiels a deux joueurs et somme nulle avec différentes structures d'information, Ecole Nationale Supérieure des Mines de Paris (comme rapporteur).
- 1994 K.E. Shahroudi, Delft University of Technology (Dept. of Aeronautics), Development and validation of a computer assisted design methodology for gas-turbine-based aircraft engines.

- 1995 A. Weeren, University of Brabant, Coordination in Hierarchical Control.
- 1996 B. de Schutter, Katholieke Universiteit Leuven.
- 1996 Xiaode Yu, Delft University of Technology.
- 1996 H.E. Wensink, Delft University of Technology.
- 1996 V. Terpstra, Delft University of Technology.
- 1996 Xue-Fen Zhang, Delft University of Technology, 'data assimilation in air pollution control'.
- 1996 A. Overkamp, Rijksuniversiteit Groningen.
- 1997 Sept. 15 P. van Gool, Dept. of Aerospace Engg., Delft University of Technology.
- 1997 Dec 1 E de Klerk, Interior Point Methods for semidefinite Programming, Delft University of Technology.
- 1997 Nov 27 Eric Menguy, Universite d'Angers, France
- 1998 Jan. 12 M. Odijk (supervisor Cooke), Delft University of Technology. Title: Railway Timetable generation.
- 1998 Jan. 28 Zhi-Gang Wei (supervisor: Stassen), Delft University of Technology, title: Mental load and performance at different automation levels.
- 1998 April 6 Dolivramento (supervisor: Bosgra).
- 1998 April 27 Z. Abidin (supervisor: Mulder).
- 1998 April 27 M. Verlaan (supervisor: Heemink).
- 1998 May, 26 Marcel Brunt (supervisor: Honderd).
- 1998 October, 13 Raymond A. de Callafon (supervisors: Bosgra, van den Hof).
- 1999 January 14 V.L. Markine, 'Optimization of the dynamical behaviour of mechanical systems' (supervisor: P. Meijers).
- 1999, February 5 Membre du jury (et rapporteur) de soutenance à l'Habilitation à Diriger des Recherches de J.-L. Boimond (Angers).
- 1999 June 16 J. Heintz (supervisor: Tzonis, TUD). Title: Coordinating Collaborative Building Design.
- 1999 A. Fernandez-Montesinos (supervisor: H. Koppelaar, TUD). Title: Modelling Expertise from the Flight Domain to Enhance Safety.
- 2000 October 31 G.Y. El Sefary(supervisor: Heemink).
- 2000 October 27 Membre du jury (et rapporteur) de soutenance à Sebastian Lahaye (Angers).
- 2001 "Gutachter" für die Habilitation von Herrn dr. M.H. Breitner (Technische Universität Clausthal, Germany).
- 2001 June 15 Van den Broek (Tilburg).
- 2001 December 20 Jean-Pierre Cochet-Terrasson (INRIA, France).
- 2002 April 16 J.W. Stijnen (supervisor: Heemink).

2.8 Not job related

- 1972-1973 Attended aviation ground course. Took some flight lessons.
- 1978-1979 Followed teleac course Russian language.
- 1980-1983 Board member rowing club 'Tubantia', Hengelo.
- 1980-1984 Joint owner of family farm.

- 1985-1990 Member oudercommissie St. Stanislascollege, Delft.
- 1985 Took elementary course Chinese language.
- 1988-onwards Rotarian Delft-Koningsveld, chairman during 1997-1998.
- 1989-onwards Member Bataafsch Genootschap der Proefondervindelijke Wijsbegeerte, Rotterdam. Since 2002 member "College van directeuren".
- Hobbies distance skating (1963, 1985, 1986, 1997 participated in the eleven city tour skating events (and finished in time, except for 1963)), tennis, rowing, piano playing, bike riding (summer 1998: from Florence to Delft), mountain hiking (tour de Mont Blanc (1995), Jotunheimen (1997), Pico Humboldt (altitude 4942 m., 1998), Aconcagua-expedition (6962 m., 2001), Elbrus-expedition (5642 m., 2002)), hiking (west highland way, Scotland, 1993; west coast trail, Vancouver Island, 2000).

3 Publications

3.1 Books

- G.J. Olsder, On the time optimal bang-bang control of linear multivariable systems with small initial perturbations, Ph.D.-thesis, Univ. of Groningen, 1971.
- P. Hagedorn, H.W. Knobloch, G.J. Olsder (eds.), Proceedings of the workshop on differential games and applications. Lecture note no. 3 in control and information sciences, Springer Verlag, 1977.
- T. Başar, G.J. Olsder, Dynamic noncooperative game theory, Academic Press, 1982, reprint 1989; xii+430 pages; ISBN 0-12-080220-1. (Substantially) revised edition, 1995; xii+519 pages; ISBN 0-12-080221-X. Revised second edition, 1999; SIAM (no. 23 in the Classics in Applied Mathematics series); ISBN 0-89871-429-X; xv+519 pages.
- F. Baccelli, G. Cohen, G.J. Olsder, J.-P. Quadrat, Synchronization and linearity: an algebra for discrete event systems, Wiley, 1992; xix+489 pages; ISBN 0-471-93609-X. Since November 2001 on the web; address: <http://www-rocq.inria.fr/scilab/cohen/SED/book-online.html>.
- G.J. Olsder, Mathematical Systems Theory, Delftse Uitgevers Maatschappij, 1994 (course notes), ISBN 90-6562-153-9, viii+181 pages. Second edition, 1998, ISBN 90-407-1272-2, x+194 pages.
- G.J. Olsder (ed.), New Trends in Dynamic Games and Applications, Annals no 3 of the International Society of Dynamic Games, Birkhauser, 1995; xii+483 pages; ISBN 0-8176-3812-1.
- K.F. Wakker, P. Schenck, G.J. Olsder, J.J.J. Kokkedee, J. Makking, R. Visser (eds), Delfts Goud: leven en werk van 18 markante hoogleraren. Technische Universiteit Delft/Bèta Imaginations, Rotterdam 2002.
- B.F. Heidergott, G.J. Olsder, J.W. van der Woude, Max-plus at work, Princeton University press, 2004.

3.2 Publications in Refereed Journals

- G.J. Olsder, On the time optimal course changing of ships, J. of Eng. Math., vol. 3, no. 2, 1969, pp. 137-150.
- M.L.J. Hautus, G.J. Olsder, A uniqueness theorem for linear control systems with coinciding reachable sets, SIAM J. on Control, vol. 11, no. 3, 1973, pp. 412-416.
- G.J. Olsder, R.C.W. Strijbos, World dynamics: a dynamic optimization study, Annals of Systems research 3, 1973, pp. 21-37.

- G.J. Olsder, On the existence of analytic solutions of systems of which the Jacobian is zero, *SIAM J. on mathematical analysis*, vol. 5, no. 1, pp. 30-42, 1974.
- G.J. Olsder, J.V. Breakwell, Role determination in an aerial dogfight, *Intern. J. of Game Theory*, vol. 3, issue 1, 1974, pp. 47-66.
- G.J. Olsder, Time optimal control of multivariable systems near the origin, *J. of Optimization Theory and Applications*, vol. 16, no. 5/6, pp. 497-517, 1975.
- G.J. Olsder, J.D. Powell, Minimum thrust levels for drag-free satellites, *Automatica*, vol. 11, 1975, pp. 627-631.
- G.J. Olsder, Differentiaalspelen en coalitievorming, *THT-wetenschapsnummer*, jan. 1975.
- G.J. Olsder, Comment on a numerical procedure for the solution of differential games, *IEEE Transactions on Autom. Control*, vol. AC-20, no. 5, 1975, pp. 704-705.
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3.5 Book Reviews

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- S. Smulders, Control of freeway traffic flow, 1996.
- V.N. Kolokoltsov and V.P. Maslov, Idempotent analysis and its applications, Kluwer, 1997, in: Mededelingen van het Wiskundig Genootschap, 1998.

4 Lectures and Visitors

4.1 Lectures given

- 1968-1972, 1975, 1976 Lectures given at the 4th up to (and including) the 8th, 11th and 12th Dutch mathematical congresses.
- 1968-1971 Some lectures, Univ. of Groningen.
- 1971-1981 Some lectures, Twente Univ. of Techn.
- 1972, January Eindhoven Univ. of Techn., 'Optimale besturingen dicht bij de oorsprong' (invited).
- 1973, January Bechtel International Center, Stanford Univ., 'World dynamics and its continuation in the Netherlands' (invited).
- 1973, March Stanford Univ., Dept. of Astronautics and Aeronautics, 'Time optimal control of multivariable systems near the origin' (invited).
- 1973, June 19 Univ. of Minnesota, Minneapolis, 'Time optimal control of multivariable systems near the origin' (invited).
- 1973, June 26 Univ. of Toronto, Canada, Dept. of Electr. Engineering, 'Time optimal control of multivariable systems near the origin' (invited).
- 1973, August 2 Navy workshop on differential games, Annapolis, Maryland, 'Role determination in an aerial dogfight' (invited).
- 1973, August 6 Harvard Univ., Cambridge, Massachusetts, 'Role determination in an aerial dogfight' (invited).
- 1974, April 23 European conf. on electrotechniques EUROCON, Amsterdam, 'World dynamics: a dynamic optimization study'.
- 1974, Sept. 4 NATO conf. on differential games, Univ. of Warwick, England, 'An example of a differential game with changing coalitions'.
- 1975, Jan. 21 Univ. of Groningen, 'Bevolkingspolitiek als een optimaal besturingsprobleem' (invited).
- 1975, Febr. 19 Technische Hochschule Darmstadt, 'Bevolkungs-politik als ein optimales Steuerungsproblem' (invited).
- 1975, May 29 Academische regeldag, Utrecht, 'Coalitievorming binnen reclamemodellen' (invited).
- 1975, August 22 Univ. of Rhode Island, Kingston, Rhode Island, 'Population planning as a distributed time optimal control problem' (invited).
- 1975, August 26 IFAC 6th world congress, Cambridge, Mass., 'Minimum thrust levels for spinning drag-free satellites'.
- 1975, Sept. 2 Conf. on directions in decentralized control, many person optimization and large-scale systems, Wakefield, Mass., 'Some thoughts about simple advertising models and the structure of coalitions' (invited).
- 1975, Dec. 1 Technische Hochschule Darmstadt, W.-Germany, 'Nichtnullsummendifferentialspiele: eine Übersicht' (invited).
- 1976, March 17 Oberwolfach, W.-Germany, 'Informationsstrukturen für Differentialspiele' (invited).
- 1976, June 8 2nd Kingston conf. on differential games and control theory, Univ. of Rhode Island, Kingston, RI, 'Informationstructures in differential games' (invited).
- 1977, Febr. 24 Catholic univ. of Brabant, 'Differentiaalspelen en economische toepassingen' (invited).
- 1977, March 23 Twente Univ. of Techn., Workshop on differential games and applications, 'On observation costs and informationstructures in stochastic differential games'.
- 1977, June 22 Universität Marburg/L, W.-Germany, 'Informationsstrukturen für Differentialspiele' (invited).

- 1977, Sept. 6 8th IFIP conf. on opt. techniques, Wuerzburg, W.-Germany, 'A differential game approach to the collision avoidance of ships'.
- 1977, Sept. 29 and 30 Mathematical Center, Amsterdam, werkweek modelvorming met speltheorie, 'Toepassingen van differentiaalspelen' (invited).
- 1977, Nov. 4 Institut für Schiffbau, Hamburg, W.-Germany, 'Das Vermeiden von Schiffscollisionen' (invited).
- 1978, March 7 Oberwolfach, W.-Germany, 'Conic surveillance evasion' (invited).
- 1978, May 25 European Institute for Advanced Studies in Management, symposium on the control of dynamic systems, Brussel, 'Nash strategies for stochastic differential games with identical observations'.
- 1978, Sept. 7 Mannheim, W.-Germany, symposium tber Operations Research, 'Linear-quadratic differential games with identical observations' (invited).
- 1978, Sept. 14 Twente Univ. of Techn., regeltechnische dag, 'Gedecentraliseerde besturingen, economische toepassingen' (invited).
- 1979, August 31 10th intern. symposium on math. programming, Montreal, 'Linear-quadratic stochastic games'.
- 1979, Oct. 5 Harvard Univ., Cambridge, Mass., 'Team optimal closed-loop Stackelberg strategies in linear quadratic differential games'.
- 1979, Oct. 9 Univ. of Illinois, Champaign, Illinois, 'Linear-quadratic stochastic games with different observations for the players' (invited).
- 1979, Oct. 11 Allerton conf., Illinois, 'Team optimal closed-loop Stackelberg strategies in linear quadratic differential games'.
- 1979, Dec. 14 18th IEEE conf. on decision and control, Fort Lauderdale, Florida, 'Mixed Stackelberg strategies in continuous kernel games'.
- 1979, Dec. 14 18th IEEE conf. on decision and control, Fort Lauderdale, Florida, 'On the saddle-point solutions of a class of stochastic differential games'.
- 1980, Febr. 22 Virginia Polytechnic Institute and State Univ., 'Stochastic differential games with different observations for the players' (invited).
- 1980, Febr. 25 Univ. of Maryland, Baltimore county, 'Stochastic differential games with diifferent observations for the players' (invited).
- 1980, March 7 Univ. of Rhode Island, Kingston, RI, 'Information structures in Stackelberg games and the relation with the Groves mechanism' (invited).
- 1980, April 19 Sochi, USSR, Ifac workshop, 'Linear-quadratic stochastic differential games' (invited).
- 1980, June 19 discussant in session Conflict and conflict management in social and biological systems (Intern. congress of art and sciences, June 6-23, Cambridge, Mass.).
- 1980, Dec. 17 Twente Univ. of Techn., stochastische systeemdag, 'A control-theoretic view on incentives' (invited).
- 1981, Febr. 23 Mathematical center, Amsterdam, 'Dynamische Stackelbergspelen en de theorie van de incentieven' (invited).
- 1981, May 6 Fysisch-mathematische faculteitsvereniging, Groningen, 'Dynamische speltheorie' (invited).
- 1981, August 26 IFAC world congress, Kyoto, Japan, 'Aspects of the Stackelberg game problem; incentive, bluff and hierarchy'.
- 1981, August 28 IFAC world congress, Kyoto, Japan, 'New techniques for modelling and control of flexible automated manufacturing systems'.

- 1981, Dec. 2 Vrije Univ. Brussel, contact group on mathematical models in human sciences, ‘A control-theoretic view on incentives, (invited).
- 1981, Dec. 11 regeltechnische dag (KIVI), Twente Univ. of Techn, ‘Differentialaalspelen’ (invited).
- 1982, March 5 Oberwolfach, W.-Germany, ‘A critical analysis of a new equilibrium concept’ (invited).
- 1982, July 13 Universitat Wuerzburg, W.-Germany, ‘Some recent developments in differential games’ (invited).
- 1982, Oct. 4 Technische Universitat Wien, Austria, ‘Some recent developments in differential games’ (invited).
- 1983, Jan. 18 3rd intern. symposium on conflict and harmony, Erasmus Univ., Rotterdam, ‘A control-theoretic view on incentives’ (invited).
- 1983, Jan. 21 Benelux meeting on system theory, Oostduinkerke, Belgium, ‘On the linear-quadratic closed-loop no-memory Nash game’.
- 1983, Febr. Gezelschap voor jonge academici, Hollandse Signaalapparaten, Hengelo, ‘Differentialaalspelen’.
- 1983, June 6 Game theory day, Catholic Univ. Nijmegen, ‘A critical analysis of a new equilibrium concept’ (invited).
- 1983, Dec. 7 Delft Univ. of Techn., ‘Multipersoonsbeslissingsproblemen’.
- 1984, Jan. 18 Systeemgroep Nederland, Utrecht, ‘Systeemtheoretische blik op incentives’ (invited).
- 1984, Febr. 10 Aula Delft Univ. of Techn., inaugural address.
- 1984, March 6 Oberwolfach, W.-Germany, ‘On the optimal manoeuvring during bearings-only tracking’ (invited).
- 1984, June 7 Erasmus University Rotterdam, congress of the world university, ‘Numerical aspects of differential games with differently informed actors’ (invited).
- 1984, August 7 Harvard Univ., ‘A critical analysis of a new equilibrium concept’ (invited).
- 1984, August 9 Eglin Air Force Base, Florida, ‘Role determination of an aerial dogfight’ (invited).
- 1984, August 9 Eglin Air Force Base, Florida, ‘Stochastic differential games’ (invited).
- 1984, August 10 Wright Patterson Air Force Base, Ohio, ‘Role determination in an aerial dogfight’ (invited).
- 1984, August 17 University of Illinois, Champaign, ‘On the optimal manoeuvring during bearings-only tracking’ (invited).
- 1984, Sept. 19 Univ. of Southern California, Los Angeles, ‘On the optimal manoeuvring during bearings-only tracking’.
- 1984, Sept. 26 Stanford Univ., Dept. of aero- and astronautics, ‘On the optimal manoeuvring during bearings-only tracking’ (invited).
- 1984, Sept. 27 Nasa Ames, Moffett Field, ‘On the optimal manoeuvring during bearings-only tracking’ (invited).
- 1984, Dec. 13 23rd IEEE conf. on decision and control, Las Vegas, ‘On the optimal manoeuvring during bearings-only tracking’.
- 1985, Dec. Mathematical Center, Amsterdam, ‘Discrete event dynamic systems’.
- 1985, Dec. Delft Univ. of Techn., ‘On the optimal manoeuvring during bearings-only tracking’.
- 1986, Jan. 16 Benelux meeting, Lunteren, ‘Discrete event dynamic systems’.
- 1986, Febr. 25 Univ. of Groningen, ‘Discrete event dynamic systems’ (invited).
- 1986, March 6 Oberwolfach, W.-Germany, ‘Discrete event dynamic systems’ (invited).
- 1986, April 8 Delft Univ. of Techn., ‘Discrete event dynamic systems’.

- 1986, April 24 Bielefeld, W.-Germany, ‘On the optimal manoeuvring during bearings-only tracking’.
- 1986, June 26 Antibes, France, ‘On the characteristic equation and minimal realizations for discrete event dynamic systems’.
- 1986, July 21–August 1 Northeast Univ. of Technology, Shenyang, China, various topics. (invited).
- 1986, August 8 Qing Hua Univ., Beijing, China, ‘Incentives’ and ‘Discrete event dynamic systems’ (invited).
- 1986, August 13 Beijing, China, ‘Adaptive Nash strategies for repeated games resulting in Pareto solutions’.
- 1986, Oct. 28 Paderborn, W.-Germany, ‘Dynamische Systeme mit diskreten Ereignissen’ (invited).
- 1986, Dec. 11 25th IEEE conf. on decision and control, Athens, Greece, ‘On a finite state space pursuit evasion game with dynamic information’.
- 1987, April 3 Kon./Shell laboratories, Amsterdam, ‘Discrete event dynamic systems’ (invited).
- 1987, June 4 Issy-les-Moulineaux, France, ‘De l’analogie des réalisations minimales dans les systèmes conventionnels et les systèmes des événements discrets’ (invited).
- 1987, July 8 Technion, Haifa, Israel, dept. of aeronautics, ‘when to use the searchlight’ (invited).
- 1987, August 3 Sopron, Hungary, IIASA-workshop, ‘Discrete event dynamic systems’ (invited).
- 1988, March 3 Benelux meeting, the Netherlands, ‘Modelling of discrete event systems’ (invited plenary lecture).
- 1988, March 22 Mathematisches Forschungsinstitut Oberwolfach, W.-Germany, ‘Stochastic discrete event systems’ (invited).
- 1988, May 10 Rutgers University, New Brunswick, NJ, ‘Discrete event dynamic systems’.
- 1988, Sept. 22 Delft Univ. of Technology, Dept. of Electrical Eng., ‘Discrete event systems and wave front array processors’ (invited).
- 1988, Nov. 7 Kon./Shell Exploration and Production Labs, Rijswijk, ‘Discrete event systems with applications in array processors’ (invited).
- 1988, Dec. 5 Univ. of Connecticut, Storrs, ‘About when to use the searchlight’.
- 1988, Dec. 7 27th IEEE conf. on decision and control, Austin, Texas, ‘Discrete event systems with stochastic processing times’ (invited).
- 1989, April 4 Philips Research Lab., Eindhoven, ‘Aspects of discrete event dynamic systems’ (invited).
- 1989, May 31 Killarney, Ireland, International conf. on systolic arrays, ‘Performance analysis of data-driven networks’ (poster session).
- 1989, June 13 Warsaw, Poland, Polish academy of sciences, ‘Dynamic game theory’ (invited).
- 1989, June 15 Warsaw, Poland, Polish academy of sciences, ‘Discrete event dynamic systems’ (invited).
- 1989, June 27 Kon./Shell Labs, Amsterdam, ‘Aspects of discrete event dynamic systems’ (invited).
- 1989, Sept. 7 INRIA, Sophia Antipolis, France, ‘Discrete event systems and Petri nets’ (invited).
- 1989, Dec. 14 28th IEEE conf. on decision and control, Tampa, Florida, ‘Asymptotic behaviour of random discrete event systems’ (invited).
- 1989, Dec. 15 28th IEEE conf. on decision and control, Tampa, Florida, ‘Applications of the theory of discrete event systems to array processors and scheduling in public transportation’ (invited).
- 1989, Dec. 21 Univ. of Illinois, Champaign, ‘Eigenvalues of dynamic min-max systems’ (invited).
- 1990, March 16 Univ. of Groningen, ‘Eigen functie en eigen waarde’ (at the occasion of the retirement of Prof. J.A. Sparenberg).

- 1990, April 17 Univ. of Groningen, 'Eigenvalues in discrete event systems' (invited).
- 1990, July 12 Univ. of California, Berkeley, 'Eigenvalues in discrete event systems'.
- 1990, September 25 Royal/Dutch Shell-Laboratories, Amsterdam, 'Dynamic programming revisited'.
- 1991, January 23 University Utrecht, 'Discrete event dynamic systems'.
- 1991, February 13 Royal/Dutch Shell-Laboratories, Amsterdam, 'New problem areas in dynamic programming'.
- 1991, July 5 Grenoble, first European Control Conference, 'Descriptor systems in the max algebra'.
- 1991, October 22 University of Tilburg, 'Discrete event systems'.
- 1991, November 8 Eindhoven Univ. of Techn., 'Discrete event systems'.
- 1992, March 18 Oberpfaffenhofen, Mathematisches Forschungsinstitut, 'Discrete event systems' (invited).
- 1992, March 20 'Systeemtheorie in de wiskunde', alumnidag Delft Univ. of Techn.
- 1992, June 16 'Introduction to DEEDS', Louvain la Neuve, Belgium (invited).
- 1992, July 17 'Minimization and maximization in discrete event systems', 5th symposium on differential games and applications, Grimentz, Switzerland (invited, plenary speaker).
- 1992, August 27 'Continuous flow systems', 3rd workshop on DEEDS, Prague (invited, plenary speaker).
- 1993, février 15 Sophia Antipolis, 'Comment utiliser le projecteur'.
- 1993, avril 23 Sophia Antipolis, 'Analyse de Systemes Min-Max'.
- 1993, June 4 London, 'Max-algebra Approach to Discrete Event systems'.
- 1993, June 9 Spa (Belgium), 'Max-algebra Approach to Discrete Event Systems'.
- 1993, July 14 Adelaide, 'Discrete Event systems and Game theory'.
- 1994, March 22 Oberwolfach, Germany, 'On structural properties of min-max systems' (invited).
- 1994, April 22 Aachen, Germany, 'Theory of discrete events' (invited).
- 1994, June 16 Sophia-Antipolis, France, 'On structural properties of min-max systems' (invited).
- 1994, Sept. 8 Kaiserslautern, 8th Conf. of the European Consortium for Mathematics in Industry (invited), 'Discrete event dynamic systems'.
- 1994, October 2-8 Bristol, England, HP-laboratories (invited), 'min-max-plus systems'.
- 1994, November 23 Delft, Christiaan Huygens, 'On discrete events and timetables for our intercity net'.
- 1994, December 2 Delft Control day, 'System theory at our university'.
- 1995, March 13 Euler institute, St Petersburg, 'On a pursuit game with information costs' (invited).
- 1995, March 17 University of St Petersburg, Peterhof, 'On time tables and max-plus systems'.
- 1995, March 24 Euler institute, St Petersburg, 'On min-max-plus systems and nonexpansive mappings' (invited).
- 1995, March 30 Benelux-meeting, Houthalen, 'Discrete event dynamic systems: about intercity nets and nonexpansive mappings' (invited).
- 1995, September 6 3rd European Control Conference, Rome (invited).
- 1995, September 28 Lezing voor wiskunde in actie (Discrete gebeurtenissen op netwerken).
- 1996, 2 februari Noordwijkerhout, Nationale wiskunde dagen.
- 1996, March 28 TMR Networks Workshop in Mathematics and Information Sciences, Brussels.
- 1996, June 5 Lezing voor University Management Course 1996.
- 1996, October 6 Lezing voor 'open dag TUD'.

- 1996, November 27 Oberwolfach.
- 1996, November 13 ETH Zurich.
- 1997, August 21 Sils-Maria (Switzerland), two financial game problem areas (invited).
- 1998, Januari 9 diesrede TUDelft, ‘Wiskunde in de Beweging’.
- 1998, March 21 ITB, Bandung, Introduction to Discrete Event Systems.
- 1998, July 6 Maastricht, 8-th International Symposium on Dynamic Games and Applications, title: A control-theoretic overview of Stackelberg games.
- 1998, July 10 Nantes, France, IFAC conference on System Structure and Control. Title: On large scale max-plus algebra models in railway systems
- 1998, July 10 Nantes, France, IFAC conference on System Structure and Control. Title: The upper-bound on the period of non-expansive mappings.
- 1998, August 28 Chia, Sardinia, International workshop on DES, WODES’98. Title: On time tables and allocation of trains.
- 1998, October 6 Delft Control Day, Aula, TUDelft. Title: Mathematics in Transportation.
- 1998, November 13 Universidad de los Andes, Merida, Venezuela. Title: The organisation of, and life at, the universities in Western Europe.
- 1999, March 22 Oberwolfach, Title: Traffic control applications.
- 1999, March 31 Paris, Title: Midterm overview alapedes – coordinator’s report.
- 1999, May 28 Delft, faculteit ITS. Praatje bij hooglerarenlunch.
- 1999, July 21 Ischia (near Naples) workshop on dynamic games and applications, Title: A differential game-theoretic approach to option pricing.
- 1999, July 30 IIASA, Laxenburg, Austria. Title: Control-theoretic thoughts on option pricing.
- 1999, December 9 Twente University. Title: Control-theoretic thoughts on option pricing.
- 1999, November 27 Opening speech Createch.
- 1999, December 11 Opening speech 50 years Kramers Laboratory.
- 2000, May 26 Opening speech for the project ‘Sand’ of AEGEE Delft.
- 2000, September 13 Padova, Italy. Title: Bang-bang control in nonzero-sum games with applications.
- 2001, June 14 Belford (France), invited, had to decline.
- 2001, June 24 Harvard, Boston (invited) Title: Discrete events: time tables, capacity questions, planning issues in railway systems.
- 2001, July 17 Cargese, Corsica (invited) Workshop on dynamic games and applications. Title: Bicycle routing for maximum suntan.
- 2001, July 18 Cargese, Corsica (invited) Workshop on dynamic games and applications. Title: On open- and closed-loop bang-bang control in nonzero-sum differential games.
- 2001, Aug. 25 Prague, Alapedes convention. Title: Time tables, capacity questions and planning issues in railway systems.
- 2001, Oct. 11 Speltheorie, Christaan Huygens, TU Delft.
- 2001, Nov. 29 Academisch leidinggeven, for personnel officers Faculty of Information Technology and Systems, TU Delft (Retraiterie Rottmeren).
- 2002, Febr. 24 - March 1 Oberwolfach. Title: Bicycle routing for maximum suntan.
- 2002, March 4-8 Dresden (invited) Workshop on “Weighted Automata: Theory and Applications”.
- 2002, April 12 Enschede, speech at the occasion of Huib Kwakernaak’s emerital status

- 2002, May 8 Perigord, CNRS action spécifique "Nouveaux Domaines", Méthodes non stochastiques en mathématiques financières", Séminaire de Beynac-Cazenac (organiser: P. Bernhard), "Differential game theoretic thoughts on option pricing and transaction costs".
- 2002, May 9 Perigord, same séminaire, "Introduction to max-plus algebra and its applications".
- 2002, June 14 Angers. Le doctorat aux Pays Bas (invitation de Ferrier).
- 2002, July 8-12 IFORS Edinburgh, semi-plenary lecture. Title: Max-plus algebra and its applications to railway systems.
- 2002, July 16 University of Stuttgart (prof. Allgöwer).
- 2003, January 15 Réunion à INRIA avec des experts d'EdF (Paris). "Introduction to game theory".
- 2003, February 4 Schrödinger Institute, Vienna. Workshop on idempotent mathematics and mathematical physics. "Min-max-plus inequalities".
- 2003, May 20 Goslar, Conference International Society of Dynamic Games. "On inverse Stackelberg problems: work in progress".
- 2003, June 13 INRA, Montpellier. "Randonnée à bicyclette pour maximiser le bronzage".
- 2003, June 19 i3s, Sophia-Antipolis. "Phenomena in inverse Stackelberg games".
- 2003, June 25 INRIA, "Introduction à la théorie des jeux". Téléconférence INRIA avec EdF (et INRIA Nancy).

4.2 Visitors

Not (yet?) documented.

5 Teaching Experience

5.1 Courses Taught

- 1968-1971 Analysis and linear algebra (freshmen).
- 1969-1971 Mathematics for students of chemistry (freshmen).
- 1971-1972 Probability (sophomores).
- 1973-1974 Analysis, algebra, differential equations, Fourier series and integral transformations (sophomores).
- 1973-1977 Optimal control theory (undergraduates).
- 1973-1977 Linear system theory (graduates).
- 1977-1981 System and optimal control theory (undergraduates).
- 1979 Summer, Summer course on algorithms and convergence (with R. Suri).
- 1980-1981 Analysis for students of mechanical eng. (freshmen).
- 1981-1982 Linear algebra.
- 1981-1982 Stochastic processes and time series analysis.
- 1984-2000 Mathematical system theory (sophomores).
- 1984-1989 Filtering and identification (undergraduates).
- 1984-1996 Multiperson decision theory (undergraduates).
- 1987 Optimal control theory (undergraduate).
- 1989,1992 Theory of discrete events (national, in Utrecht, graduates, with C. Praagman).
- 1993-1999 Students colloquium (preparation and oral presentation of mathematical articles).

- 1997-1999 organization and guidance of the ‘practische studie’.
- 1998,1999 Discrete Event Dynamic Systems (in the framework of ‘System theory, special subjects’).
- 1999,2000 Mathematical models in financial markets (graduates, with A.W. Heemink and J.A.M. van der Weide).
- 2002-onwards Discrete and continuous optimization (graduates, with C.Roos).

5.2 Seminars

- 1969 Functional analysis and time optimal control.
- 1970 Optimization by vector space methods.
- 1971 Stochastic processes in information and dynamic systems
- 1973 Control of distributed parameter systems.
- 1974 Game theory.
- 1975 Management applications of modern control theory.
- 1976 Differential games.
- 1977 Applied functional analysis.
- 1981 Incentives.
- 1985 Recursive identification.
- 1986 Model reduction and H-infinity theory.
- 1987 Nonlinear geometric control.
- 1994 Viscosity solutions.
- 1995 Mathematics, derivatives, options and securities.
- 1996 H-two theory and linear matrix inequalities.
- 1997 Nonnegative Matrices.
- 1998 Wavelets.

5.3 Special Courses

- 1980, Dec. Enschede, Course on dynamic game theory (postdoctoral).
- 1992, Jan. Surabaya, Course on linear system theory.
- 1992, August/September Summer course for mathematics teachers of secondary schools about system theory (Eindhoven).
- 1993, June 7-11 Spa (Belgium) Belgian/French/Netherlands Summerschool on Discrete Event Systems.
- 1998, February/March Surabaya, Course on linear systems and optimal control.
- 1998, May 4-7 26eme ecole de printemps d’informatique theorique, Ile de Noirmoutier, France.
- 1998, November 2-20 Universidad de los Andes, Merida, Venezuela, course on discrete event systems.

5.4 Guidance of Theses

5.4.1 Supervision of Baccalaureate theses

- 1974 J.L. Walter Een stoch. model voor de activatie van spiervezels.
1974 M.F.A.M. van Maarseveen Autorijden met minimaal benzineverbruik.
1975 A.J. de Leeuw Een drie-persoons niet-nulsomspel.
1976 M.D. Merbis Stakingen als differentiaalspel.
1977 G.J. van Essen Stoch. besturingsproblemen met onzekere waarnemingen.
1977 E. Smit Pareto-oplossingen van niet convexe besturingsproblemen.
1981 P. Boekhoudt Optimalisatie bij informatie-overdracht.
1981 S.A. Smulders Het evenwichtsconcept van Van der Weel.

5.4.2 Supervision of Master theses (* refers to not finished)

- 1975 J. Brouwer Optimale bevolkingsgroei.
1975 B. Korkers Optimaal sturen onder beperkende voorwaarden.
1975 J. Jeuring De wereld energie situatie als differentiaalspel.
1976 H.J.M. Wijers De EEG als differentiaalspel.
1977 J.L. Walter Het vermijden van botsingen bij schepen.
1977 K. Nauta Het besturen van een leeftijdsafhankelijk biologisch systeem.
1977 B.C.M. Hofland Het optimaal sturen met minimale energie.
1977 J.S. Spit Optimaal sturen van regionaal economische groei.
1978 A.J. de Leeuw Bevolkingspolitiek onder verschillende voorwaarden.
1978 A.J. Kappers Autorijden met minimaal brandstofverbruik.
1979 H.C. van Driel Differentiaalspel met verschillend geïnformeerde spelers.
1980 G.J. van Essen Stackelberg games with memory.
1986 N.M. de Reus Design and implementation of a user model for the navsat simulator.
1987 A. Sluyter Viscositeitoplossingen voor eerste-orde HJB-vergelijkingen.
1987 R.E. de Vries Discrete-event dynamic systems.
1987 A. Schrijver Optimale besturingstheorie in de macro-economie.
1987 R.L.M. Peeters Parameter estimation with constraints.
1988 A.G. van der Berg Flexibele robots.
1988 P.J. Dekker Conjectural variations.
1988 H.C. Henderson Computer-aided spillway design using the boundary element method.
1988 R. Tijsma Het projectie-filter.
1988 J.L.T. de Vries Dynamisch positioneren van boorschepen.
1988 N.vd. Zijpp Gedecentraliseerde filters.
1988 M. de Hoog Verhittingsoven als een verdeeld parameter systeem.
1988 L. Kuiters Storingsanalyse toegepast op discrete gebeurtenissen.
1988 R. Heyne Nietlineair filteren en passief peilen.
1989 G. Braat Sturen van flexibele robots.

- 1989 P.F. Heinen Sturen van verdeelde parameter systemen.
- 1989 J. van Ginkel Parameterschatten bij vliegcorridors.
- 1989 H.J. Barnard Discrete event systems in VLSI-design.
- 1990 E. de Valk Estimation of deadtimes.
- 1990 R. Westerkamp Eindig dimensionale compensatoren voor oneindig-dimensionale systemen.
- 1990 G.J. Marseille Adaptief regelen van verdeelde parameter systemen.
- 1990 A. vd. Bogaard* Systemen met stochastische parameters.
- 1990 R. vd. Broek Discrete gebeurtenissen met exponentieel verdeelde parameters.
- 1990 J. vd. Linden Reduced order discrete time compensator.
- 1990 R. Been Passief peilen m.b.v. maximum likelyhood methoden.
- 1990 W. Visser Filteren met Markov-parameters.
- 1990 T. Bader Planning op de raffinaderij.
- 1990 M.P. Jialal* Tijdsafhankelijke vormen van samenwerking.
- 1991 W.E. Kreuger Stochastic ocean routing.
- 1991 N. Koppert Numerical optimal control in process industry.
- 1991 M. Valk Geometrische systeemtheorie.
- 1991 E. Rotteveel-Snoei* Perturbaties en discrete gebeurtenissen.
- 1991 J.A. Hogendoorn 2-D-systems.
- 1991 L. Stravers Relatie grafentheorie en systeemtheorie.
- 1991 A. Kegel H-oneindig theorie en nulsom differentiaalspelen.
- 1991 R.M.C.W. Stoop Flexible manufacturing m.b.v. Petri-netten.
- 1991 E. van Bracht Productieplanning met vast aantal buffers.
- 1992 M. vd. Burg Systeemtheorie en Markov-ketens in de chemie.
- 1992 A. Overbeeke Verdeelde parameter systemen.
- 1992 P. Twaalfhoven H-oneindig theorie en differentiaalspelen.
- 1993 J.W. Dorrepaal Geometrische systeemtheorie
- 1993 S.F. de Waijer Robotica
- 1994 C. vd. Hulst Using graph theory for the analysis of two control problems
- 1994 S. Hoogendoorn Viscositeitsoplossingen
- 1995 M. Lankhorst PID regelaar warmteplaat
- 1995 A.F. de Kort Impedantiebesturing voor robots
- 1996 F. Veger The pricing of European-style options on currencies when exchange rates follow a jump-diffusion process
- 1997 W. Volwerk Shape and attitude estimation of towed sonar systems
- 1997 E.D. den Heijer Modeling of piezo hysteresis with application to a scanning tunneling microscope
- 1997 J. Ruigrok Optimal control in windshear
- 1997 A. Cartrysse Conflictfree routing during the landing of aircraft
- 1997 J.J.J. Potters Extensions of Black-Scholes in financial mathematics
- 1997 M. Pinkse Scanning tunneling microscope
- 1997 M.J. de Ruiter Nonlinear elements in electrical designs

- 1998 E. de Gids* Frequentiemodel v.h. schoudergewricht en parameter- schatten
- 1999 G.J. Fitie Switching networks
- 1998 Lengkeek
- 1998 M. van der Bol Minimale realisaties in de max-plus algebra
- 2000 T. Bakhtiar
- 2000 Subchan
- 2000 R. Baldewings Modelvorming en stabiliteitsanalyse van pulsbreedte- gemoduleerde schakelende elec- trische netwerken
- 2001 P. Bogaarts Pricing foreign exchange options with stochastic interest rates
- 2002 S(imone) Abbenhuis Digitaal regelen van gedistribueerde parameter systemen.

5.4.3 Supervision of Ph.D. theses (* refers to not finished)

- 1979-1983 M. Moraal* Decentralized stochastic control theory with applications to economic growth.
- 1985-1993 R. Hut* Combined filtering and optimal control.
- 1987-1992 M.B. Klompstra Dynamic games and control theory.
- 1987-1992 R.E. de Vries Discrete event dynamic systems.
- 1988-1992 H. de Waard Adaptive control of a diffusion furnace.
- 1987-1992 H.J.A.F. Tulleken Test signals and constrained identification.
- 1987-1990 Gao Li-qun Multipersondecisionmaking (degree in China).
- 1988-1990 H.A.P. Blom Kalman-filters with jump-parameters.
- 1988-1991 G. Moek Aerospace applications of estimation theory.
- 1989-1993 J.G. Braker Applications of discrete event system theory.
- 1990-1995 C. te Stroet Calibration of stochastic groundwater flow models (13 april 1995).
- 1991-1996 E. van Bracht Discrete event theory applied to carlamp manufacturing (full support by Philips).
- 1992-1994 L. Nguyen* ('twaio') Distributed control.
- 1992-1994 F. Barb Reduced order models in distributed control.
- 1990-1996 N. vd. Zijpp Verkeersregelingen
- 1993-1997 N. Nguyen* Viscosity solutions.
- 1995-2000 Subiono Min-max-plus systems
- 1994-1996 R.M.P. Goverde ('twaio') Civil Aircraft Autopilot Design using Robust Control
- 1995-2000 J.M.T.A. Adriaens Microscopie
- 1997-2001 vacancy Game theory and financial mathematics
- 1998-2002 vacancy idem (jointly with Heemink)
- 1998-2003 G. Soto Y Koelemeijer Transportation systems (deterministic) (DIOC-position)
- 1997-2001 R.J. van Egmond* Transportation systems (stochastic) (DIOC- position)
- 1998-2002 vacancy OiO position supported by Rained etc.
- 1998-1998 S. Stramigioli From differentiable manifolds to interactive robot control
- 1998-2003 Yusuf Fuad Switching networks
- 1999-2003 D. Ettes* Stock exchange analysis and portfolio management - a fuzzy logic approach -
- 1999-2001 A.F. de Kort
- 1998-2001 R.M.P. Goverde