SHORT CURRICULUM VITAE
J.A. THAS

Surname: THAS
Given names: Joseph, Adolphe, François
Date of birth: 13 October 1944
Home address: Lijsterstraat 16, B-9810 Nazareth, Belgium
University address: Department of Mathematics
Ghent University
Krijgslaan 281 - S22
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Details of education

1. Licentiate in Mathematics, 1966 (Ghent University).

2. PhD in Mathematics, 1969 (Ghent University).

3. Habilitation, 1973 (Ghent University).

Professional employment

1. Assistant, 1966-70, Ghent University.

2. Full Professor, 1970-, Ghent University.

3. Emeritus Professor, 2010-

4. Director of the "Seminar of Geometry and Combinatorics" of Ghent University, 1970-1992.

5. Head of the Department of Pure Mathematics and Computer Algebra, 1992-2002 .

6. Supervisor of seventeen PhD theses.

Courses 1990-

Graduate and undergraduate courses on projective geometry, algebraic geometry, codes, graphs and designs; postgraduate courses on recent developments in finite geometries.

Honours, prizes, awards

1. **Scholarship European Research Associates** S.A., 1965-66.

2. **Award, Royal Academy of Sciences, Letters and Fine Arts of Belgium**, 1969.

3. **Scientific Louis Empain Award**, 1970.

4. **Award François Deruyts** of the Royal Academy of Belgium, 1970.

5. **Member of the Royal Flemish Academy of Belgium for Science and the Arts** (since 1988, Vice-director in 1998 and Director in 1999).

6. **Euler 1994 Medal of the ICA** (The **Euler Medal** of the **Institute of Combinatorics and its Applications** is the recognition for a distinguished lifetime career contribution to combinatorial research by a Fellow of the ICA who is still active in research).

7. **Invited Speaker at the International Congress of Mathematicians**, Berlin, 1998.

8. **Erskine Fellowship** 1999 of the University of Canterbury, Christchurch (New Zealand).

9. **Elsevier Speaker** at the conference "Finite Fields and Applications", Melbourne, Australia, 2007.

10. **Platinum Jubilee Lecturer 2008** at the Indian Statistical Institute (Delhi, Kolkata, Bangalore).

11. **Inaugural Fellow of the American Mathematical Society** (honor in view of distinguished contributions to mathematics), 2012.

Board member of professional associations

1. Member, Honorary Member, Vice-Secretary and Secretary of the National Committee for Mathematics (member since 1981, honorary member since 2011, vice-secretary and secretary from 1988 till 2004); delegate for Belgium at the General Assembly of the International Mathematical Union at Dresden (1988), Shanghai (2002) and Santiago de Compostella (2006).

2. Member of the advisory committee (mathematics) of the Fund for Scientific Research-Flanders, 1983-1993.

3. Secretary of the contact group "Combinatorial Geometry and Finite Groups" of the National Fund for Scientific Research of Belgium , 1974-1994.

4. Member of the board of the Belgian Mathematical Society (from 1986 till 1992).

5. Member Scientific Council of EIDMA (Euler Institute of Discrete Mathematics and its Applications, The Netherlands) (1996-2010).

6. Vice-director of the Class of Sciences of the Royal Flemish Academy of Belgium for Science and the Arts (1998).

7. Director of the Class of Sciences of the Royal Flemish Academy of Belgium for Science and the Arts (1999).

Editor of journals and book series

1. Editor and managing editor of **Simon Stevin**, A Quarterly Journal of Pure and Applied Mathematics (editor: 1970-1977; managing editor: 1977-1994).

2. Editor of **Bulletin of the Belgian Mathematical Society - Simon Stevin,** 1994- .

3. Editor of **Atti Seminario Matematico e Fisico dell'Università di Modena**.

4. Editor of **Journal of Algebraic Combinatorics,** Kluwer Academic Publishers.

5. Editor of "**Research and Lecture Notes in Mathematics, Combinatorics Subseries**" (Mediterranean Press, Rende, Cosenza).

6. Editor of "**Annals of Combinatorics**".

7. Editor of "**Innovations in Incidence Geometry**".

(Co)-organization of international conferences

1. **International Conference on Finite Geometry and Combinatorics**, 1 - 7 June 1986, Deinze, Belgium (co-organizers: F. Buekenhout, F. De Clerck, J. Doyen, J.W.P. Hirschfeld, J.J. Seidel).

2. **Finite Geometries and Designs, Third Isle of Thorns Conference**, 15 - 21 July 1990, Isle of Thorns, East Sussex, England (co-organizers: J.W.P. Hirschfeld, D.R. Hughes).

3. **Second International Conference on Finite Geometry and Combinatorics**, 31 May - 6 June 1992, Deinze, Belgium (co-organizers: A. Beutelspacher, F. Buekenhout, F. De Clerck, J. Doyen, J.W.P. Hirschfeld).

4. **Tits Buildings and Related Geometries**, A conference on the occasion of the 65th birthday of J. TITS, 21 – 22 March 1996, Gent (co-organizers: F. Buekenhout, F. De Clerck, H. Van Maldeghem).

5. **Third International Conference on Finite Geometry and Combinatorics**, 18 - 24 May 1997, Deinze, Belgium (co-organizers: A. Beutelspacher, A. Blokhuis, F. Buekenhout, F. De Clerck, J. Doyen, W. Haemers, J.W.P. Hirschfeld, H. Van Maldeghem).

6. Organizer of the session **Combinatorics and Finite Geometries** at the **Joint Meeting of the London Mathematical Society and the Belgian Mathematical Society (BLMS'99)**, 14 - 16 May 1999, Brussels, Belgium (co-organizer : P.J. Cameron).

7. Member Academic Committee of the **Third Shanghai Conference on Designs, Codes and Finite Geometries**, 14 - 18 May 1999, Jiao Tong University, Shanghai, China.

8. **Finite Geometries, Fourth Isle of Thorns Conference**, 16 - 21 July 2000, Isle of Thorns, East Sussex, England (co-organizers: A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel).

9. Organizer of the **Academy Contact Forum "Generalized Polygons"**, 20 October 2000, Palace of the Academies, Brussels (co-organizers: F. De Clerck, L. Storme, H. Van Maldeghem).

10. **Workshop on "Finite Geometries" at the Mathematisches Forschungsinstitut at Oberwolfach**, 2-8 December 2001 (co-organizers: A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel).

11. **EIDMA 2001 Symposium**, 25 and 26 October 2001, Oostende (co-organizers: F. De Clerck, L. Storme, H. Van Maldeghem).

12. Member Academic Committee of the **Fourth Shanghai Conference on Combinatorics**, 24-28 May 2002, Jiao Tong University, Shanghai, China.

13. **Finite Geometries, First Irsee Conference**, 16-21 February 2003, Irsee, Germany (co-organizers: A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel).

14. Academy Contact Forum **Mathematics and Genomics**, 18 October 2003, Palace of the Academies, Brussels (co-organizers: J. Teugels, A. Bultheel).

15. **Incidence Geometry**, La Roche-en-Ardenne, 23-29 May 2004 (co-organizers: F. De Clerck, L. Storme, H. Van Maldeghem).

16. Member of Advisory Board of **Com^{2}MaC Conference on Association Schemes, Codes and Designs**, Pusan Nat. Univ., Pusan, Korea, 19-23 July 2004.

17. Member Academic Committee of the **Fifth Shanghai Conference on Combinatorics**, 14-18 May 2005, Jiao Tong University Shanghai and Taihu Lake, China.

18. Academy Contact Forum **Coding Theory and Cryptography**, 7 October 2005, Palace of the Academies, Brussels (co-organizers: L. Storme, S. Nikova, B. Preneel).

19. **Finite Geometries, Second Irsee Conference**, 10-16 September 2006, Irsee, Germany (co-organizers: A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel)

20. Academy Contact Forum **Coding Theory and Cryptology II**, 21 September 2007, Palace of the Academies, Brussels (co-organizers: L. Storme, S. Nikova, B. Preneel).

21. Member Academic Committee of the **Sixth Shanghai Conference on Combinatorics**, 24-28 May 2008, Jiao Tong University Shanghai.

22. Member Academic Committee of the **International Conference on Designs, Matrices and Enumerative Combinatorics**, 19-22 May 2011, Academia Sinica, Taipei, Taiwan.

23. Member Academic Committee of the **Seventh Shanghai Conference on Combinatorics**, 24-28 May 2011, Jiao Tong University Shanghai and Changsu.

24. **Finite Geometries, Third Irsee Conference**, 19-24 June 2011, Irsee, Germany (co-organizers: D. Ghinelli, J.W.P. Hirschfeld, D. Jungnickel).

25. **Incidence Geometry and Buildings**, 6-10 February 2012, Ghent University, Belgium (co-organizers : B. De Bruyn, T. De Medts, K. Thas, H. Van Maldeghem)

26. **Buekenhout Geometry**, 20-21 September 2012, Ghent University, Belgium (co-organizers : B. Muehlherr, H. Van Maldeghem).

27. Member Academic Committee of the **Eight Shanghai Conference on Combinatorics**, 24-28 May 2014, Jiao Tong University Shanghai and Jiaxing.

28. Member Academic Committee of the **Ninth Shanghai Conference on Combinatorics**, 24-28 May 2017, Jiao Tong University, Shanghai.

29. Member Academic Committee of the **Tenth Shanghai Conference on Combinatorics**, 24-28 May 2021, Jiao Tong University, Shanghai.

30. Member of the Scientific Committee and Organizing Committee of the conference "Polygons, Buildings and Related Geometries", in honor of Hendrik Van Maldeghem's 60th birthday, 19-22 September 2022, Ghent University, Belgium (co-organizers: P.-E. Caprace, B. De Bruyn, Y. De Neyt, T. De Medts, J. Desmet, P. Jansen, D. Leemans, B. Mhlherr, D. Rijpert, K. Thas).

Referee or expert for journals and organisations

Referee for the following international journals

1. Journal of Geometry.
2. Israel Journal of Mathematics.
3. Mathematisches Zeitschrift.
4. Journal of Combinatorial Theory.
5. European Journal of Combinatorics.
6. Bulletin of the London Mathematical Society.
7. Mathematical Proceedings of the Cambridge Philosophical Society.
8. Geometriae Dedicata.
9. Bulletin of the Belgian Mathematical Society.
10. IEEE Transactions on Information Theory.
11. Journal of the Indian Institute of Science.
12. Results in Mathematics.
13. Designs, Codes and Cryptography.
14. Journal of Algebraic Combinatorics.
15. Journal of Combinatorial Designs.
16. Finite Fields and Their Applications.
17. Annals of Discrete Mathematics.
18. Journal of the London Mathematical Society.
19. Archiv der Mathematik.
20. Ars Combinatoria.
21. Applicable Algebra in Engineering, Communication and Computing.
22. Journal of Statistical Planning and Inference.
23. Forum Mathematicum.
24. Proceedings of the American Mathematical Society.
25. Australasian Journal of Combinatorics.
26. Annales de l'Institut Fourier.
27. Pacific Journal of Mathematics.
28. Journal of Combinatorial Mathematics and Combinatorial Computing.
29. Discrete Mathematics.
30. Linear Algebra and Applications.
31. Atti del Seminario Matematico e Fisico dell'Università di Modena.
32. Proceedings of the Indian Academy of Sciences.
33. Contributions to Algebra and Geometry.
34. International Journal of Mathematics and Mathematical Sciences.
35. Advances in Geometry.
36. Note di Matematica.
37. Journal of the Australian Mathematical Society.
38. Verhandelingen Koninklijke Vlaamse Academie van België voor Weten-

schappen en Kunsten.
39. Bulletin of the ICA.
40. Innovations in Incidence Geometry.
41. Glasnik Matematicki.
42. SIGMA.
43. Electronic Journal of Combinatorics.
44. Combinatorica.

Referee for several publishing companies

Referee for scientific organizations

1. Fonds voor Wetenschappelijk Onderzoek - Vlaanderen, Belgium.

2. Fonds National de la Recherche Scientifique, Belgium.

3. Centre for Mathematics and Informatics, Amsterdam, The Netherlands.

4. National Security Agency, U.S.A.

5. National Science Foundation, U.S.A.

6. Natural Sciences and Engineering Research Council of Canada, Canada.

7. Australian Research Council, Australia.

8. Training and Mobility of Researchers, European Commission.

9. Stichting Mathematisch Centrum, Amsterdam.

10. Nato Collaborative Research Grants.

11. Consiglio Nazionale Delle Ricerche, Italia.

12. INTAS Expert(International Association for the promotion of cooperation with scientists from the New Independent States of the former Soviet Union).

13. National Science Foundation (Marsden Fund), New Zealand.

14. The Royal Society of New Zealand.

15. The Canada Council - Conseil des Arts du Canada.

16. Ministero dell'Università e della Ricerca Scientifica e Tecnologica (MURST), Italië.

17. Engineering and Physical Sciences Research Council, United Kingdom.

18. Alexander von Humboldt Foundation.

19. Deutsche Forschungsgemeinschaft.

20. Research Grants Council, Hong Kong.

21. National Agency for the Evaluation of Universities and Research Institutes (ANVUR), Italy.

22. TU Eindhoven mid-term review.

4. Visits and talks at foreign universities

Visiting Professor

University of Louvain (Belgium) (1971-72)
University of Brussels (Belgium) (1974-1975)
University of Western Ontario (Canada) (February 1975)
University of Bologna (Italy) (June 1976)
University of Tübingen (Germany) (May 1977)
University of Bologna and University of Rome (Italy) (April 1980)
University of London, Westfield College and University of Oxford (England) (February 1981)
Miami University and Ohio State University (U.S.A.) (July 1981)
Miami University , Ohio (U.S.A.) (November 1982)
University of Adelaide (Australia) (August 1982)
Universities of Rome, Naples and L'Aquila (Italy) (November 1983)
University of Sussex (England) (January 1984)
University of London, Queen Mary College (England) (April 1985)
University of London, Queen Mary College and Royal Holloway College, University of Birmingham, University of Newcastle upon Tyne (England) (November 1985)
University of Western Ontario (Canada) (July 1986)
Universities of Rome and l'Aquila (Italy) (March 1987)

Universities of Firenze and Siena (Italy) (February 1988)
University of Western Ontario (Canada) (December 1988)
Kansas State University (U.S.A.) (November 1989)
Academia Sinica (Beijing), University of Beijing and Xidian University (Xi'an) (China) (October 1990)
University of Naples (Italy) (March 1990)
University of Rome (Italy) (February 1990)
University of Kent (Great Britain) (January 1991)
University of London and Royal Holloway College (London, Great Britain) (January 1991)
University of Firenze (Italy) (February 1991)
Kansas State University (U.S.A.) (July 1991)
University of Rome and University of Naples (Italy) (February-March 1992)
Eötvös Loránd University (Budapest, Hungary) (May 1992)
University of Western Australia (Perth, Australia) (July 1992)
University of Rome (Italy) (February 1993)
Kansas State University (U.S.A.) (February-March 1993)
University of Adelaide (Australia) (July 1993)
University of Augsburg (Germany) (January 1994)
University of Firenze (Italy) (February 1994)
University of Naples and Rome (Italy) (February 1995)
Kansas State University (U.S.A.) (January 1995)
University of California, Santa Cruz (U.S.A.) (January 1995)
University of Firenze (Italy) (February 1996)
Jiao Tong University (Shanghai, China) (May 1996)
Euler Institute of Discrete Mathematics (Eindhoven, The Netherlands) (April 1996)
University of Rome (Italy) (February 1998)
University of Canterbury at Christchurch (New Zealand) (July-August 1999).
University of Rome (Italy) (March 2000).
University of California, Santa Cruz (U.S.A.) (May 2000).
University of Bielefeld (Germany) (December 2001).
University of Rome (Italy) (February 2002).
University of Adelaide (Australia) (November - December 2003).
University of Perugia (Italy) (March 2004).
University of Perugia (Italy) (April 2005).
University of Ljubljana (Slovenia) (May 2007).
Indian Statistical Institute (Delhi, Kolkata, Bangalore) (January-February

2008).
University of Colorado at Denver (U.S.A.) (February-March 2008).
Jiao Tong University (Shanghai, China)(April-May 2010).
Jiao Tong University (Shanghai, China)(May-June 2014).
Jiao Tong University (Shanghai, China)(May 2017).

Talks at foreign universities

1 "Combinatorial characterizations of the classical generalized quadrangles", Johannes-Gutenberg University of Mainz, April 1975.

2 Five talks on "Partial geometries and generalized quadrangles", University of Bologna, June 1976.

3 "Recent characterizations of generalized quadrangles" and "Determination of all partial geometries which are embeddable in $PG(n,q)$ or $AG(n,q)$", University of Tübingen, May 1977.

4 "Ovoids and spreads of finite classical polar spaces" and "Flocks of quadrics in $PG(3,q)$", Technical University of Eindhoven, May 1978.

5 Four talks at the University of Bologna and two talks at the University of Rome on "Embedding of geometries in finite projective and affine spaces", April 1980.

6 Four talks on "Combinatorics of finite generalized quadrangles", University of London, Westfield College, February 1981.

7 "Ovoids and spreads of finite classical polar spaces, and applications",University of London, February 1981.

8 "Ovoids and spreads of finite classical polar spaces, and applications", University of Oxford, February 1981.

9 "Construction of generalized quadrangles and partial geometries", University of Sussex, February 1981.

10 "Construction of all known partial geometries", Miami University, Ohio, July 1981.

11 "Construction of all known generalized quadrangles", Ohio State University, Ohio, July 1981.

12 Nine talks on "Ovoids and spreads of generalized quadrangles", University of Adelaide, August 1982.

13 "Geometries in finite projective spaces : recent results", Miami University, Ohio, November 1982.

14 "3-regularity in generalized quadrangles of order (s, s^2)", University of Rome, November 1983.

15 "3-regularity in generalized quadrangles of order (s, s^2)", University of Naples, November 1983.

16 "The theorem of Dembowski and Heise-Percsy from the point of view of generalized quadrangles", University of l'Aquila, November 1983.

17 "Generalized quadrangles : recent results", University of London, Queen Mary College, April 1985.

18 "Generalized quadrangles : recent results", University of Birmingham, May 1985.

19 "Pseudopolar spaces of polar rank three", University of London, Royal Holloway College, May 1985.

20 "Generalized quadrangles : recent results", University of Newcastle upon Tyne, May 1985.

21 "Complete arcs and algebraic curves in $PG(2, q)$" Technical University of Eindhoven, May 1985.

22 "Flocks of quadrics and applications", Technical University Braunschweig, January 1986.

23 "Flocks of quadrics and applications", University of Hannover, January 1986.

24 "Flocks of quadratic cones and generalized quadrangles",University of Western Ontario, July 1986.

25 "Flocks of quadratic cones, translation planes, and generalized quadrangles : recent results", University of l'Aquila, March 1987.

26 "M.D.S. codes, arcs in $PG(n, q)$ with q even, and a solution of three fundamental problems of B. Segre", University of Rome, March 1987.

27 "Flocks, maximal exterior sets and inversive planes", University of Colorado at Denver, October 1987.

28 "Flocks of quadrics", University of Firenze, February 1988.

29 "Maximal exterior sets", University of Firenze, February 1988.

30 "Solution of a classical problem on finite inversive planes", University of Siena, February 1988.

31 "Solution of a classical problem on finite inversive planes", University of Western Ontario, December 1988.

32 "Flocks and maximal exterior sets of quadrics", Kansas State University, November 1989.

33 "Moufang conditions, Desargues configurations and transitivity for finite generalized quadrangles" and "M.D.S. codes and arcs in $PG(n, q)$ with q even : an improvement of the bounds of Bruen, Thas and Blokhuis", University of Naples, March 1990.

34 "M.D.S. codes and arcs in $PG(n, q)$ with q even : an improvement of the bounds of Bruen, Thas and Blokhuis", University of Rome, February 1990.

35 Two talks on "Linear M.D.S. codes and k-arcs in $PG(n, q)$" at Xidian University of Xi'an, China, October 1990.

36 "Partial geometries" and "Open problems in finite geometry", University of Beijing, China, October 1990.

37 Twelve talks on "Finite generalized quadrangles", Academia Sinica, Beijing, China, October 1990.

38 "New developments in the theory of finite generalized quadrangles: a survey", University of Kent, January 1991.

39 New developments in the theory of finite generalized quadrangles: a survey", University of London Seminar, January 1991.

40 "New developments in the theory of finite generalized quadrangles: a survey", Royal Holloway College, January 1991.

41 Two talks on "Recent results on generalized quadrangles", Univ. di Firenze, February 1991.

42 "A characterization of Hermitian curves and a generalization of a theorem of Segre", Kansas State University, July 1991.

43 "A characterization of Hermitian curves and a generalization of a theorem of Segre", University of Rome, February 1992.

44 Six talks on "A characterization of Hermitian curves and a generalization of a theorem of Segre", "Generalized quadrangles of order (s, s^2)" and "New flocks of the quadratic cone in $PG(3, q)$", University of Naples, February-March 1992.

45 Four talks on "New flocks of the quadratic cone in $PG(3, q)$" and "Generalized quadrangles of order (s, s^2)", University of Western Australia, Perth, July 1992.

46 "A characterization of Hermitian curves and a generalization of a theorem of Segre" Eötvös Loránd Univ., Budapest, May 1992.

47 "m-systems of finite classical polar spaces" and "Ovoids and spreads of finite generalized quadrangles", University of Rome, February 1993.

48 "m-systems of finite classical polar spaces" Kansas State University, February 1993.

49 Nine talks on "m-systems of polar spaces", "Spreads and ovoids in finite generalized quadrangles" and "Flocks of quadrics in $PG(n, q)$: partial flocks of quadrics and characterizations of flocks of quadratic cones", University of Adelaide, July-August 1993.

50 Three talks on "Linear M.D.S. (Maximum Distance Separable) codes and arcs of the projective space $PG(n, q)$: how combinatorics, projective and algebraic geometry can be applied to coding theory", University of Augsburg, January 1994.

51 "Ovoids of the quadric $Q(2n, q)$" and "Hyperovals, flocks and partial flocks", University of Firenze, February 1994.

52 "Weakly embedded polar spaces and embedded generalized hexagons", Kansas State University, January 1995.

53 "k-arcs, hyperovals, partial flocks and flocks", University of California at Santa Cruz, January 1995.

54 "k-arcs, hyperovals, partial flocks and flocks", University of Naples, February 1995.

55 "Weakly embedded polar spaces and embedded generalized hexagons", University of Rome, March 1995.

56 "Flocks and partial flocks of quadratic cones in $PG(n,q)$, n odd", "Generalized quadrangles and the Axiom of Veblen", and "Spreads and ovoids of quadrics and generalized hexagons", University of Firenze, February 1996.

57 Eight talks on "Finite generalized quadrangles" at the Technological University of Eindhoven, April 1996.

58 Eight talks on "Finite generalized quadrangles" and "Flocks of quadrics" at the Jiao Tong University at Shanghai, China, May 1996.

59 "Extended generalized quadrangles of order $(q+1, q-1)$", University of Rome, February 1998.

60 "Finite geometries, varieties and codes", "Embeddings of the flag geometry of projective planes in finite projective spaces and applications", two talks on "3-Regularity in generalized quadrangles: a survey, recent results and the solution of a longstanding conjecture", two talks on "m-Systems and partial m-systems of polar spaces: old and new results", University of Canterbury, Christchurch, New Zealand, July-August 1999.

61 "Flocks and hyperovals", University of Rome, March 2000.

62 "Finite geometries, varieties and codes" and "Embeddings of dual classical generalized hexagons in finite projective spaces", University of California at Santa Cruz, May 2000.

63 "On Hermitian and quadric Veroneseans", Technical University Eindhoven, May 2001.

64 "Flocks, planes, quadrangles, ovals, ovoids, eggs and Veronese" (2 talks) and "Characterizations of finite quadric Veroneseans", Universität Bielefeld, December 2001.

65 "Eggs with applications to generalized quadrangles, flocks, planes, ovoids and hyperovals", University of Rome, February 2002.

66 "Finite translation generalized quadrangles", 10 lectures at the Università degli Studi di Perugia, March 2004.

67 "Finite Geometries: Classical Problems and Recent Developments", Universität Stuttgart, June 2004.

68 "m-Systems and partial m-systems of polar spaces: old and new results", 5 lectures at the Università degli Studi di Perugia, April 2005.

69 "Finite geometries: classical problems and recent developments", University of Ljubljana (Slovenia), May 2007.

70 "Finite geometries: classical problems and recent developments", University of Adelaide (Australia), July 2007.

71 "Generalized hexagons and Singer geometries", at the Indian Statistical Institute, Delhi, January 2008.

72 "Finite fields and Galois geometries", at the Indian Statistical Institute, Kolkata, January 2008.

73 "Generalized hexagons and Singer geometries", at the Indian Statistical Institute, Bangalore, February 2008.

74 "Finite fields and Galois geometries", at the University of Colorado at Denver, USA, March 2008.

75 "Characterizations of Veronese and Segre varieties", and "Finite geometries : classical problems and recent developments" at the Jiao Tong Univ., Shanghai, China, April 2010.

76 "Embeddings of affine planes in finite projective spaces" at the Jiao Tong Univ., Shanghai, China, May 2014.

77 "Covers of generalized quadrangles" at the Jiao Tong Univ., Shanghai,
China, May 2017.

Total : 170 talks at foreign universities

5. Talks at conferences and colloquia

1. "Bijdrage tot de theorie der k-kappen in projectieve ruimten van Galois", Scientific Conference for University Students, Leiden, March 1968.

2. "Rationale normaalkrommen en k-bogen in Galois ruimten", Colloquium of the Belgian Centre for Mathematical Research, December 1968.

3. "Rationale normaalkrommen en $(q + 2)$-bogen in de Galois ruimte $S_{q-2,q}(q = 2^h)$", Colloquium of the Belgian Centre for Mathematical Research, December 1969.

4. "De m-dimensionale projectieve ruimte $S_m(M_n(GF(q)))$ over de totale matrix algebra $M_n(GF(q))$ der $n \times n$-matrices met elementen in het Galois veld $GF(q)$", Geometry Colloquium at the Univ. of Brussels, December 1969.

5. "The m-dimensional projective space $S_m(M_n(GF(q)))$ over the total matrix algebra $M_n(GF(q))$ of the $n \times n$-matrices with elements in the Galois field $GF(q)$", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, April 1970.

6. "Ovoidal translation planes", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, April 1971.

7. "On 4-gonal configurations", Summerschool C.I.M.E. on "Combinatorial geometries and their applications", Bressanone 1972.

8. "Construction of maximal arcs and partial geometries", Group of Contact "Combinatorial Geometry and Finite Groups" of the National Fund for Scientific Research of Belgium, Gent, August 1973.

9. "Translation 4-gonal configurations", Colloquium of the Belgian Centre for Mathematical Research, December 1973.

10. "Existensie- en enumeratieproblemen in verband met de theorie der designs", Mathematics Colloquium Univ. of Antwerp, February 1974.

11. "Partiële meetkunden en 4-gonale konfiguraties", Colloquium at the Univ. of Louvain, April 1974.

12. "4-gonal configurations with parameters $r = q^2+1$ and $k = q+1$", Conference on "Finite geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, May 1974.

13. Two talks at the "Advanced Study Institute on Combinatorics", Breukelen, July 1974 (Talks : "On semi ovals and semi ovoids" and "Flocks").

14. Two talks on "Finite inversive planes", Post-university courses for Secondary School Teachers, August 1974.

15. "Partial geometries and generalized quadrangles", Colloquium on "Finite geometries", University of Western Ontario, February 1975.

16. "Combinatorial characterizations of the classical generalized quadrangles", Conference on "Finite geometries and designs", Isle of Thorns, Sussex, September 1975.

17. *Main speaker* at the "Advanced Study Institute on Combinatorics", Berlin, September 1976 (Two talks on "Partial geometries and generalized quadrangles").

18. "Partial geometries in finite affine spaces", Sixth British Combinatorial Conference, Royal Holloway College, University of London, July 1977.

19. "Ovoids and spreads of finite classical polar spaces", Colloquium on "Finite geometries", Univ. of Sussex, April 1978.

20. *Main speaker* at the Conference of the Belgian Mathematical Society, Brussels, May 1979 (Talk : "Flocks of circle geometries, and applications").

21. "Flocks of circle geometries and applications", Conference on "Finite geometries", Han-sur-Lesse, June 1979.

22. *Main speaker* at the Seventh British Combinatorial Conference, Trinity College, Cambridge, August 1979 (Talk : "Geometries in finite projective and affine spaces").

23. "Moufang conditions for finite generalized quadrangles", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, April 1980.

24. "Moufang conditions for finite generalized quadrangles", Conference on "Finite geometries and designs", Isle of Thorns, Sussex, June 1980.

25. *Main speaker* at the Conference "Strutture Combinatorie e Loro Applicazioni", Trento, October 1980 (3 talks : "Combinatorics of finite generalized quadrangles : a survey").

26. "Characterizations of classical generalized quadrangles : a survey", Colloquium at the University of Surrey, October 1980.

27. "Moufang conditions for finite generalized quadrangles", Convegno Internazionale Geometrie Combinatorie e Loro Applicazioni, Roma, June 1981.

28. "Ovoids and spreads of generalized quadrangles", Colloquium "Interuniversity Seminar on Combinatorics", Gent, November 1981.

29. "Elementary proofs of two fundamental theorems of B. Segre without using the Hasse-Weil theorem" and "A remark on the generalized hexagon $H(q)$ arising from the group $G_2(q)$", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, March 1982.

30. *Main speaker* at the 10th Australian Combinatorial Conference, Adelaide, August 1982 (Talk : "Geometries in finite projective spaces : recent results").

31. "The generalized hexagon $H(q)$ and Kantor's generalized quadrangles $K(q)$", American Mathematical Society meeting at East Lansing, Michigan, November 1982.

32. "The generalized hexagon $H(q)$ and Kantor's generalized quadrangle $K(q)$, Colloquium "Interuniversity Seminar on Combinatorics", Gent, January 1983.

33. "Extensions of finite generalized quadrangles", Conference on "Combinatorica", Istituto Nazionale di Alta Matematica Francesco Severi, Roma, May 1983.

34. "Circle geometries and generalized quadrangles", Meeting on "Finite Geometries", University of Sussex, January 1984.

35. "Characterization of generalized quadrangles by generalized homologies", Conference on "Groups and Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, May 1984.

36. *Main speaker* at the Conference "Finite Geometries", Winnipeg, July 1984 (Talk : "Circle geometries and generalized quadrangles").

37. *Main speaker* at the Conference "Combinatorics '84", Bari, September 1984 (Talk : "Complete arcs in $PG(2, q)$").

38. "Complete arcs and algebraic curves in $PG(2, q)$", Colloquium at the University of Sussex, February 1985.

39. "Generalized quadrangles and flocks of quadric cones", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, May 1985.

40. "Flocks of quadrics and applications", Conference on "Foundations of Geometry" at the Mathematisches Forschungsinstitut of Oberwolfach, October 1985.

41. "Flocks of quadrics and applications", Nato Workshop on "Geometries and Groups, Finite and Algebraic", Leeuwenhorst, March 1986.

42. "Flocks of quadratic cones and generalized quadrangles", Fifth Combinatorial Day, Catholic University Tilburg, August 1986.

43. "Flocks of quadratic cones, translation planes, and generalized quadrangles : recent results", Fifth International Conference on Geometry, Haifa, March 1987.

44. "M.D.S.-codes, arcs in $PG(n, q)$ and three fundamental problems of B. Segre", Justus-Liebig-Universität Giessen, Colloquium in honour of the 70th birthday of Prof. G. Pickert, June 1987.

45. "Flocks, maximal exterior sets and inversive planes", American Mathematical Society meeting at Lincoln, Nebraska, November 1987.

46. *Main speaker* at the Conference "Combinatorics '88", Ravello, May 1988 (Talk : "Recent results on flocks, maximal exterior sets and inversive planes").

47. *Main speaker* at the Conference "Finite Buildings, Related Geometries and Applications", Pingree Park Conf. Center, Colorado, July 1988 (Talks : "Solution of a classical problem on finite inversive planes" and "Recent results on flocks, maximal exterior sets and inversive planes").

48. "Linear M.D.S. codes, arcs in $PG(r, q)$ and three fundamental problems of B. Segre", International Workshop on Algebraic and Combinatorial Coding Theory, Varna, September 1988.

49. *Main speaker* at the Geometry Session of the Annual Meeting of the Canadian Mathematical Society, Toronto, December 1988 (Talk: "Linear M.D.S. codes, arcs in $PG(n, q)$ and three fundamental problems of B. Segre: a survey").

50. "New flocks, new planes, new generalized quadrangles, a combinatorial characterization of all classical and dual classical generalized quadrangles, the complete classification of all maximal exterior sets, and recent results on spreads and partial spreads of Hermitian varieties", Conference on "Finite Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, May 1989.

51. *Main speaker* at the Workshop on Finite Geometries and Groups, CWI Amsterdam, June 1989 (Talk : "Flocks, partial flocks and maximal exterior sets").

52. "Partial flocks, new flocks, new planes, new generalized quadrangles and the complete classification of all maximal exterior sets", 12th British Combinatorial Conference, Norwich, July 1989.

53. *Main speaker* at the Conference "Combinatorics '90", Gaeta, May 1990 (Talk : "Old and new results on spreads and ovoids of finite classical polar spaces").

54. "New developments in the theory of finite generalized quadrangles : a survey", Conference of the Belgian Mathematical Society and the National Committee for Mathematics in honour of the 60th birthday of Prof. J. Tits, June 1990.

55. "A characterization of Hermitian curves and a generalization of a theorem of B. Segre", Sixth International Conference on Geometry, Haifa, April 1992.

56. "M.D.S. codes and arcs in projective spaces: a survey", Colloquium at the Univ. of Sussex, May 1992.

57. *Main speaker* at the 18th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, Univ. of Western Australia, Perth, July 1992 (Talk: " Characterizations of Hermitian curves").

58. *Main speaker* at the Conference "Combinatorics '92", Acireale, Catania, Sicily, September 1992 (Talk: "M.D.S. codes and arcs in projective spaces: A survey").

59. "The affine plane $AG(2,q)$ q odd, has a unique one point extension", Conference on "Extensions of Buildings and Geometries" at the Mathematisches Forschungsinstitut of Oberwolfach, January 1993.

60. *Main speaker* at the 19th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, Univ. of Adelaide, Australia, July 1993 (Talk: "m-systems of polar spaces").

61. "Ovoids of the quadric $Q(2n,q)$" and "k-arcs, hyperovals, partial flocks and flocks", Colloquium on "Finite Geometries" at the University of Gent, February 1994.

62. "Symplectic spreads in $PG(3,q)$, inversive planes and projective planes", Conference on "Designs and Codes" at the Mathematisches Forschungsinstitut of Oberwolfach, April 1994.

63. "Constructions of polygons from buildings" two talks at a Colloquium on "Buildings" at the University of Brussels, May 1994.

64. *Main speaker* at the Second Upper-Michigan Combinatorics Workshop on Designs, Codes and Geometry, August 1994 (Talk: "k-arcs, hyperovals, partial flocks and flocks").

65. *Main speaker* at the Conference "Combinatorics '94", Rome-Montesilvano, September 1994 (Talk: "Symplectic spreads in $PG(3,q)$, inversive planes and projective planes").

66. "Embeddings of polar spaces and generalized polygons", Discrete Algebra and Geometry day (DAG DAY) at the University of Ghent, October 1994.

67. *Main speaker* at the "R.C. Bose Memorial Conference", Colorado State Univ. (USA), June 1995 (Talk: "Weakly embedded polar spaces and embedded generalized hexagons").

68. "Generalized quadrangles of order (s, s^2) and Veronese surfaces", Colloquium on "Finite Geometries " at the University of Gent, January 1996.

69. "Generalized quadrangles and the axiom of Veblen" at the Conference "Tits Buildings and Related Geometries", Univ. of Gent, March 1996.

70. *Main speaker* at the Second Shanghai Conference on "Designs, Codes and Finite Geometries", Jiao Tong University, Shanghai (China), May 1996 (Talk: "Flocks and partial flocks of quadratic cones: A survey").

71. *Main speaker* at the "First Pythagorean Conference", at Spetses (Greece), June 1996 (Talk: "Generalized quadrangles and the Axiom of Veblen").

72. *Main speaker* at the Conference "Groups and Geometries", at Siena (Italy), September 1996 (Talk: "Embeddings of geometries in finite projective spaces : A survey").

73. *Main speaker* at the Conference "Combinatorics '96", Assisi (Italy), September 1996 (Talk: "Generalized quadrangles of order (s, s^2) : Recent Results").

74. "Lax embeddings of generalized quadrangles in finite projective spaces", Colloquium on "Finite Geometry and Buildings" at the University of Brussels, April 1997.

75. *Main speaker* at the Conference "Finite Geometries and Applications", at Winnipeg (Canada), June 1997 (Talk: "Lax embeddings of finite generalized quadrangles").

76. *Main speaker* at the "Finite Geometry Workshop" at Adelaide (Australia), September 1997 (Talks: "Embeddings of generalized polygons and polar spaces including open problems" and "Extended generalized quadrangles of order $(q + 1, q - 1)$").

77. *Main speaker* at the European Conference on Algebra and Discrete Mathematics "Combinatorics-Algebraic, Geometric and Probabilistic

Aspects", Feliu de Guixols (Spain), September-October 1997 (Talk:"Embeddings of geometries in finite projective spaces").

78. "Some recent results in the theory of finite generalized polygons", Colloquium on "Finite Geometries and Buildings" at the University of Brussels, May 1998.

79. *Main speaker* at the Conference "Combinatorics '98", Mondello (Palermo, Italy), June 1998 (Talk : "3-Regularity in generalized quadrangles : A survey, recent results and the solution of a longstanding conjecture").

80. **Invited Lecture** at the Inte rnational Congress of Mathematicians in Berlin, August 1998 (Talk: "Finite Geometries, Varieties and Codes").

81. Talk at the Baer-colloquium held in November 1998 at the TU-Braunschweig (Talk: " Recent results on generalized polygons").

82. Six talks on "m-Systems and partial m-systems of polar spaces: old and new results" at the "Seminar on Incidence Geometry" at the University of Gent, February-March 1999.

83. "Weak embeddings of line-regular generalized hexagons in finite projective spaces", Second Pythagorean Conference at Samos, 30 May - 5 June 1999.

84. *Main speaker* at the Conference "(Moufang) Polygons and (Twin) Buildings", Ghent, June 1999 (Talk: "Generalized Quadrangles: The axiom of Veblen, Property (G), flocks and BLT-sets".

85. Two talks on "Veronese varieties in $PG(n, q)$: applications", "Flocks and hyperovals" and "Constructions of semipartial geometries" at the "Seminar on Incidence Geometry" at the University of Gent, November 1999.

86. "Foutverbeterende codes in theorie en praktijk" on 25 October 2000, in the frame of the lecture series UPV at the University of Brussels (VUB).

87. *Main speaker* at the Conference "Finite Simple groups, Geometries, and Related Topics", Conference in Honor of Ernest Shult, Kansas State University, March 2001 (Talk: "Ovoids, spreads and m-systems of finite polar spaces : existence, nonexistence, constructions").

88. "Hermitian Veronese varieties", Colloquium on "Incidence Geometry" at the University of Brussels, May 2001.

89. *Main speaker* at the special session on "Topological Geometry" of the Belgium Math. Soc.-German Math. Soc. conference at Liège, Belgium, June 2001 (Talk : "Circle geometries and generalized quadrangles").

90. *Main speaker* at the 18th British Combinatorial Conference, University of Sussex, Falmer, Brighton, July 2001 (Talk : "Ovoids, spreads and m-systems of finite classical polar spaces").

91. Two talks on "Eggs: old and new results" at the "Seminar on Incidence Geometry" at Ghent University, March 2002.

92. *Main speaker* at the Fourth Shanghai Conference on Combinatorics, Shanghai, China, May 2002 (Talk: "Characterizations of quadric Veroneseans over finite fields").

93. *Main speaker* at "Combinatorics 2002", Maratea (Potenza), Italy, June 2002 (Talk: "Characterizations of quadric and Hermitian Veroneseans over finite fields").

94. "Characterizations of quadric and Hermitian Veroneseans over finite fields", International Congress of Mathematicians 2002, Bejing, China, August 2002.

95. Two talks on "Switching of generalized quadrangles of order s, and applications" at the "Seminar on Incidence Geometry" at Ghent University, December 2002.

96. "Finite Moufang generalized quadrangles: a pure geometric proof", Colloquium on "Incidence Geometry" at the University of Brussels, January 2003.

97. "Finite Moufang generalized quadrangles: a pure geometric proof", Third Pythagorean Conference, Rhodes-Greece, June 1-7, 2003.

98. "Characterizations and classification of (finite) Moufang quadrangles", conference "Geometric and Group Theory Methods in Physics and Mathematics", Batumi State University (Batumi, Georgia), September 2003.

99. "Characterizations of finite translation generalized quadrangles", at the 989th AMS Meeting, University of Colorado at Boulder, Colorado, USA, October 2003.

100. *Main speaker* at the conference "Groups and Geometries", A tribute to Francis Buekenhout, November 21-22, 2003, University of Brussels (Talk: "Generalized polygons in finite projective spaces").

101. *Main speaker* at the "Workshop on Incidence Geometry", University of Adelaide (Australia), December 9-12 2003 (Talk: "On generalized ovoids and generalized ovals").

102. *Main speaker* at the conference "Trends in Geometry", Conference in memory of Beniamino Segre, Accademia Nazionale dei Lincei and Università "La Sapienza", Roma, 7-9 June 2004 (Talk: "Finite Geometries: Classical Problems and Recent Developments").

103. *Main speaker* at the conference "Com^{2}MaC Conference on Association Schemes, Codes and Designs", Pusan Nat. Univ. 19-23 July 2004, Pusan, Korea (Talk: "Finite translation generalized quadrangles, pseudo-ovals and pseudo-ovoids").

104. *Main speaker* at the workshop "2004 Com^{2}MaC Workshop on Distance-Regular Graphs and Finite Geometry", Pusan Nat. Univ. 24-26 July 2004, Pusan, Korea (Talk: "Embeddings of generalized polygons in finite projective spaces I").

105. "Finite translation generalized quadrangles: old results, new results, open problems", at the conference "Finite Geometries, Groups and Computation", Pingree Park Campus of Colorado State University, September 4-9, 2004.

106. *Main speaker* at the Fifth Shanghai Conference on Combinatorics, Shanghai, China, May 2005 (Talk: "Subquadrangles of finite generalized quadrangles")

107. "Subquadrangles of order s of flock generalized quadrangles of order (s^2, s)", at the conference "Geometric and Algebraic Combinatorics 3", Oisterwijk, The Netherlands, August 14-19, 2005.

108. *Main Speaker* at "Combinatorics 2006", Ischia, Italy, June 2006 (Talk: "SPG-reguli, SPG-systems, BLT-sets and sets with the BLT-property").

109. "Characterizations of the finite split Cayley hexagons by intersection numbers", International Congress of Mathematicians 2006, Madrid, Spain, August 2006.

110. *Main Speaker* at the Special Session on Finite Geometry and Combinatorics of the 1025th AMS Meeting, Miami University, Oxford, Ohio, March 2007 (Talk: "Generalized quadrangles and the BLT-property").

111. *Main speaker* at "8th International Conference on Finite Fields and Applications: Fq^8", Melbourne, Australia, July 2007 (Talk: "Finite Fields and Galois Geometries").

112. "Introduction to Galois geometries: classical results and recent research", in the series " wie-doet-wat-colloquium", Ghent University, October 2007.

113. "Finite translation generalized quadrangles" at the conference "Perspectives in Mathematical Sciences", Indian Statistical Institute, Bangalore, India, February 4-8, 2008.

114. *Main speaker* at the "Chat Yin Ho Memorial Conference on Combinatorics and Groups", University of Florida, Gainesville, USA, February 2008 (Talk: "Generalized hexagons and Singer geometries").

115. *Main speaker* at the "Sixth Shanghai Conference on Combinatorics", Shanghai, China, May 2008 (Talk: "Generalized hexagons and Singer geometries").

116. *Main Speaker* at the "VIth National Conference on Geometry in Bursa", Bursa, Turkey, July 2008 (Talk: "Finite fields and Galois geometries").

117. *Main Speaker* at "Geometric and Algebraic Combinatorics 4", Oisterwijk, The Netherlands, August 2008 (Talk: "Generalized ovals in $PG(3n-1, q)$, with q odd: A new approach").

118. *Main speaker* at "An International Conference on Finite Geometry to Honor the Career of Norman L. Johnson on the Occasion of his 70th Birthday", San Antonio, USA, March 2009 (Talk: "Characterizations of quadric Veroneseans: A survey").

119. *Main speaker* at "Combinatorics 2010", Verbana, Italy, July 2010 (Talk: "Veronese and Segre Varieties : recent results").

120. *Main speaker* at "International Conference on Designs, Matrices and Enumerative Combinatorics", Tapei, Taiwan, May 2011
(Talk : "Generalized ovals in $\mathrm{PG}(3n-1, q)$ with q odd : a new approach").

121. *Main speaker* at the Seventh Shanghai Conference on Combinatorics, Shanghai, China, May 2011 (Talk: "Characterizations of Veronese and Segre varieties")

122. *Main speaker* at a workshop on Combinatorics" at Jiao Tong University Shanghai, China, on 29 May 2011 (Talk:"Finite Fields and Galois Geometries").

123. "Non-linear embeddings of affine planes in projective spaces" at the conference "Buekenhout Geometry", Ghent University, September 2012.

124. "Open problems in finite projective spaces : Arcs and caps, I" at the "Eight Shanghai Conference on Combinatorics", Shanghai, China, May 2014.

125. *Main speaker* at the Nantong workshop on "Combinatorial Theory and Coding Theory", Nantong, China, May 2014 (Talk: "Open problems in finite projective spaces : Arcs and caps, II").

126. *Main speaker* at the "Rocky Mountain Conference on Graphs, Geometry and Combinatorics", University of Colorado at Denver, USA, July 2014. (Talk: "Finite affine planes in projective spaces").

127. *Main speaker* at the "Brussels Summer School of Mathematics", Université Libre de Bruxelles, August 2015. (Talk: "Arcs, Caps and Codes").

128. *Main speaker* at the one-day conference "Breaking Boundaries between Analysis, Geometry and Topology", University of Sussex, September 2015. (Talk: "Arcs, Caps and Codes").

129. *Main speaker* at "The 48th Southeastern International Conference on Combinatorics, Graph Theory and Computing", Florida Atlantic University, Boca Raton, Florida, USA, March 2017 (Two talks: "Arcs, Caps and Codes: Old Results, New Results, Generalizations").

130. "Arcs, Caps and Generalizations" at the UGent-ULB-VUB Colloquium on the occasion of the 80th birthday of F. Buekenhout, Ghent, April 2017.

131. *Main speaker* at the "International Conference on Combinatorics", Academia Sinica, Taipei , Taiwan, May 2017 (Talk: "Arcs, Caps and Generalizations").

132. "Generalized ovals and generalized ovoids" at the "Ninth Shanghai Conference on Combinatorics", Shanghai, China, May 2017.

133. *Main speaker* at the "Summer School on Finite Geometry", University of Sussex, Brighton, UK, June 2017 (Four talks: "Arcs, Caps and Codes: Old Results, New Results, Generalizations').

134. *Main speaker* at the "Tenth Shanghai Conference on Combinatorics", Shanghai, China, May 2021 (Talk: "Pseudo-ovals and Pseudo-ovoids : 10 Open Problems", Zoom Talk).

135. *Main speaker* at the conference "GL70, A conference in honor of Gulielmo Lunardon", Naples, January 2023 (Talk: "Pseudo-ovals, pseudo-hyperovals, pseudo-ovoids, translation generalized quadrangles: some of my favorite problems").

   Total : 156 talks at conferences

6. Talks at the Belgian Academy of Sciences, Letters and Fine Arts

1. Lineaire M.D.S. codes en drie fundamentele problemen van B. Segre, April 1989.

2. Recente ontwikkelingen in de theorie van de eindige veralgemeende vierhoeken, december 1992.

3. Fields Medals, Nevanlinna Prize, IMU Silver Plaque, april 1999.

7. Publications

a. <u>Books</u>

1 **Een studie betreffende de projectieve rechte over de totale matrix algebra $M_3(K)$ der 3×3-matrices met elementen in een algebraïsch afgesloten veld K**, Verh. Kon. Vl. Ac. voor Wet., Lett. en Sch. K. van België, Kl. der Wet. Jg. 31, nr. 112 (1969), 151pp.

2 **Enkele aspecten van de theorie der axiomatische projectieve vlakken** (with J. Bilo), Simon Stevin, Supplement 55 (1981), 144pp.

3 **Finite generalized quadrangles** (with S.E. Payne), Research Notes in Mathematics ♯ 110, Pitman Publ. Inc., Boston-London-Melbourne 1984, 318pp.

4 **General Galois geometries** (with J.W.P. Hirschfeld), Oxford University Press, Oxford 1991, 424pp.

5 Two chapters in "**Handbook of incidence geometry**", Editor F. Buekenhout, North-Holland, 1995. Titles of chapters: "**Projective geometry over a finite field**" (pp295-347) and "**Generalized polygons**" (pp383-431).

6 **Translation generalized quadrangles** (with K. Thas and H. Van Maldeghem), Series in Pure Mathematics - Vol. 26, World Scientific, Singapore 2006, 376pp.

7 **Finite generalized quadrangles, Second edition** (with S.E. Payne), European Mathematical Society, Series of Lectures in Mathematics, 2009, xi + 287 pp.

8 **General Galois geometries, Second edition** (with J.W.P. Hirschfeld), Springer Verlag, London, 2016, xvi + 409 pp.

b. <u>Editor of Proceedings</u>

1. Co-editor of "**Advances in Finite Geometry and Designs**" (with J.W.P. Hirschfeld and D.R. Hughes), Oxford University Press, Oxford 1991, 440pp.

2. Co-editor of **"Finite Geometry and Combinatorics"** (with A. Beutelspacher, F. Buekenhout, F. De Clerck, J. Doyen, J.W.P. Hirschfeld), Cambridge University Press, Cambridge 1993, 424pp.

3. Co-editor of **"Finite Geometries and Combinatorics"** (with A. Beutelspacher, A. Blokhuis, F. Buekenhout, F. De Clerck, J. Doyen, W. Haemers, J.W.P. Hirschfeld, H. Van Maldeghem), *Bull. Belg. Math. Soc.* 5 (1998), 121-484.

4. Member Editorial Committee for the Proceedings of the **R.C. Bose Memorial Conference** (Editor J.N. Srivastava), *Journal of Statistical Planning and Inference* Volume 72 Numbers 1/2 (1998) 1-408, and Volume 73 Numbers 1/2 (1998) 1-420.

5. Co-editor of **"Finite Geometries"** (with A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel), Kluwer Academic Publishers, Dordrecht 2001, 366pp.

6. Co-editor of **"Generalized Polygons"** (with F. De Clerck, L. Storme, H. Van Maldeghem), Proceedings of the Academy Contact Forum of October 2000, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2001, 204 pp.

7. Co-editor of a special issue of *Designs, Codes and Cryptography* on the Proceedings of "**Finite Geometries**" (with A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel), *Designs, Codes and Cryptography*, Volume 29, Numbers 1/2/3 (2003) 5-250.

8. Co-editor of **"Mathematics and Genomics"** (with A. Bultheel and J. Teugels), Proceedings of the Academy Contact Forum of October 2003, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2005, 104 pp.

9. Co-editor of the special issue "**Finite Geometries, First Irsee Conference**" of "*Discrete Mathematics*" (with A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel), *Discrete Mathematics*, Volume 294, Issues 1-2 (2005) 1-224.

10. Co-editor of **"Incidence Geometry"** (with F. De Clerck, L. Storme, H. Van Maldeghem), Bull. Belg. Math. Soc. 12 (2005) 641-939.

11. Co-editor of **"Coding Theory and Cryptography"** (with S. Nikova, B. Preneel, L. Storme), Proceedings of the Academy Contact Forum of October 2005, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2006, 112pp.

12. Co-editor of a special issue of **Designs, Codes and Cryptography** on the Proceedings of *"Finite Geometries, Second Irsee Conference"* (with A. Blokhuis, J.W.P. Hirschfeld, D. Jungnickel), *Designs, Codes and Cryptography*, Volume 47, Numbers 1-3 (2008) 1-303.

13. Co-editor of **"Coding Theory and Cryptography"** (with S. Nikova, B. Preneel, L. Storme), Proceedings of the Academy Contact Forum of September 2008, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2008, 112pp.

14. Co-editor of a special issue of **"Designs, Codes and Cryptography"** on the Proceedings of *"Finite Geometries, Third Irsee Conference"* (with D. Ghinelli, J.W.P. Hirschfeld, D. Jungnickel), *Designs, Codes and Cryptography*, Volume 68, Numbers 1-3 (2013) 1-426.

c. Papers

1. Over de θ-normalen van een kegelsnede, Simon Stevin, 40e Jg., Afl.III (1967), 107-112.

2. Over de θ-normalen van een parabool, Simon Stevin, 42e Jg., Afl. I-II (1968), 51-64.

3. Dubbelverhouding van een geordend puntenviertal op de projectieve rechte over een associatieve algebra met éénelement, Simon Stevin, 42e Jg., Afl. III (1969), 97-111.

4. Theorems concerning the fourdimensional manifold of lines of the three-dimensional projective space $S_{3,\gamma}$, Simon Stevin, 43e Jg., Afl. II-III (1969-70), 55-59.

5. (**Book**) Een studie betreffende de projectieve rechte over de totale matrix algebra $M_3(K)$ der 3×3-matrices met elementen in een algebraïsch afgesloten veld K, Verh. Kon. Vl. Ac. voor Wet., Lett. en Sch. K. van België, Kl. der Wet., Jg. XXXI, nr. 112 (1969), 151pp.

6. A generalization to $(3m - 1)$-dimensional space of a theorem on two triangles reciprocally polar with respect to a conic (with O. Bottema), Med. Kon. Vl. Ac. voor Wet., Lett. en Sch. K. van België, Kl. der Wet., Jg. XXXIII, nr. 3 (1971), 11pp.

7. Deduction of properties, valid in the projective space $S_{3n-1}(K)$, using the projective plane over the total matrix algebra $M_n(K)$, Simon Stevin, 46e Jg., Afl. I-II (1972), 3-16.

8. Bijdrage tot de theorie der k-kappen in projectieve ruimten van Galois, Med. Kon. Vl. Ac. voor Wet., Lett. en Sch. K. van België, Kl. der Wet., Jg. XXX, nr. 13 (1968), 15pp.

9. Normal rational curves and k-arcs in Galois spaces, Rend. di Mat. (6) 1 (1968), 331-334.

10. Connection between the Grassmannian $G_{k-1;n}$ and the set of the k-arcs of the Galois space $S_{n,q}$, Rend. di Mat. (6) 2 (1969), 121-134.

11. Sur le nombre d'espaces linéaires non isomorphes de n points, Bull. de la Soc. Math. de Belg., Tome XXI, Fasc. 1 (1969), 57-66.

12. Normal rational curves and $(q+2)$-arcs in a Galois space $S_{q-2,q}(q = 2^h)$, Accad. Naz. Lincei, Rend. Cl. Sc. Fis. Mat. e Nat. 8, Vol. 47, Fasc. 5 (1969), 249-252.

13. Number of regular homographies of a Galois space (with R. Puystjens), Rend. di Mat. (6) 3 (1970), 285-289.

14. The m-dimensional projective space $S_m(M_n(GF(q)))$ over the total matrix algebra $M_n(GF(q))$ of the $n \times n$-matrices with elements in the Galois field $GF(q)$, Rend. di Mat. (6) 4 (1971), 459-532.

15. Connection between the n-dimensional affine space $A_{n,q}$ and the curve C with equation $y = x^q$, of the affine plane A_{2,q^n}, Rend. Ist. Mat. Trieste (2) 2 (1970), 146-151.

16. Un théorème concernant les systèmes de racines, Bull. Acad. Roy. Belg., Cl. des Sc., 1970, 707-710.

17. An equivalent to Pappus' theorem in the affine plane $A_2(K)$ over a corpus K with characteristic different from two, Simon Stevin, 44e Jg., Afl. IV (1971), 186-187.

18. The number of Desargues-configurations of the projective plane $S_{2,q}$ over the Galois field $GF(q)$ with characteristic two or three (with R. Puystjens), Simon Stevin, 44e Jg., Afl. IV (1971), 160-170.

19. Ovoidal translation planes, Arch. der Math. (23) 1 (1972), 110-112.

20. A combinatorial problem, Geometriae Dedicata 1 (1973), 236-240.

21. Construction of partial geometries, Simon Stevin, 46e Jg., Afl. III (1973), 95-98.

22. 4-gonal subconfigurations of a given 4-gonal configuration, Rend. Accad. Naz. Lincei 8, Vol. 53, Fasc. 6 (1972), 520-530.

23. 4-gonal configurations, in "Finite geometric structures and their applications" (ed. by A. Barlotti), C.I.M.E. Bressanone 1972, 249-263.

24. Flocks of finite egglike inversive planes, in "Finite geometric structures and their applications" (ed. by A. Barlotti), C.I.M.E. Bressanone 1972, 189-191.

25. On 4-gonal configurations, Geometriae Dedicata 2 (1973), 317-326.

26. (**Book**) De m-dimensionale projectieve ruimte $S_m(M_n(GF(q)))$ over de totale matrix algebra $M_n(GF(q))$ der $n \times n$-matrices met elementen in het Galois veld $GF(q)$, Habilitation Thesis, 135pp (1973).

27. On semi ovals and semi ovoids, Geometriae Dedicata 3 (1974), 229-231.

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