

CURRICULUM VITAE OF GIORGIO PICCI

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Personal Data

Born: May 26, 1942 in Vittorio Veneto, Italy.
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Education: Dr. Engineering degree (cum laude) in Electronic Engineering, University of Padova, Italy, July 1967.

Present Position: Since 1980: Professor, Department of Information Engineering University of Padova, Padova, Italy.
Chair: Model Identification and Data Analysis.

Previous Positions :

- November 1970–October 1975: Lecturer with the Department of Statistics, University of Padova.
- August 1973–October 1980: Researcher with LADSEB-CNR, Laboratory of the National Research Council, Padova, Italy.
- November 1975–October 1980: Associate Professor, Institute of Electrical and Electronic Engineering, University of Padova .

Visiting Appointments

- February–October 1973: Visiting Assistant Professor, Division of Applied Mathematics, Brown University, Providence, R.I.
- November 1973: Consultant, Center for Mathematical System Theory, University of Florida, Gainesville, Florida.
- Spring Semester 1976: Visiting Scientist, Electronic Systems Laboratory, Massachusetts Institute of Technology, Cambridge, Massachusetts.
- June 1976: Visiting Scientist, Department of Mathematics, University of Kentucky, Lexington, Kentucky.
- October 1976: Visiting Scientist, Department of Mathematics, University of Groningen, The Netherlands.
- May-June 1977 and Fall Semester 1978: Visiting Assistant Professor, Department of Mathematics, University of Kentucky, Lexington, Kentucky.
- Spring Semester 1980: Visiting Associate Professor, Department of Mathematics, University of Kentucky, Lexington, Kentucky.
- August-September 1981: Visiting Scientist, Mathematisch Centrum (CWI), Amsterdam, The Netherlands.
- Fall Semester 1982: Visiting Associate Professor, University of Kentucky, Lexington, Kentucky.
- August 1983: Visiting Fellow, Mathematisch Centrum (CWI), Amsterdam, The Netherlands.
- Academic Year 1986/87: Visiting Professor, Department of Electrical and Computer Engineering, Arizona State University, Tempe, Arizona.
- Fall Semester 1988: Distinguished Visiting Professor, Department of Electrical and Computer Engineering, Arizona State University, Tempe, Arizona.
- August 1990: Visiting Scientist, System and Decision Sciences (S.D.S.) program, I.I.A.S.A. Laxembourg, Vienna.
- September-October 1994: Visiting Scholar Department of Applied Mathematics and Physics, Kyoto University, Kyoto, Japan.
- Academic year 1995/96: Visiting Professor, Department of System Science and Mathematics, Washington University, St. Louis, Missouri.
- Many one-month appointments and shorter visits with the Division of Optimization and System Theory, Department of Mathematics, Royal Institute of Technology, Stockholm, Sweden 1985–1999.

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- Invited visiting professor at the Mittag-Leffler Institute, Stockholm, Sweden, February 2003.

Plenary/Keynote Invited Addresses

- Invited plenary speaker at the Workshop on *Numerical Techniques in System Engineering Problems*, Lexington, Kentucky, June 1980.
- Invited plenary speaker at the NATO-ASI *Stochastic Systems: the Mathematics of Filtering and Identification and Applications*, Les Arcs, France, July 1980
- Invited plenary speaker at the Symposium *Sistemi Dinamici Stocastici*, Rome, June 1982.
- Invited plenary speaker at the seventh *Mathematical Theory of Networks and Systems (MTNS) Symposium*, Stockholm, Sweden, June 1985.
- Invited keynote speaker (three times) at the *System Theory Day*, Amsterdam 1982, Groningen 1985 and Groningen 1989.
- Invited keynote speaker at the *9-th Benelux meeting on Systems and control*, Veldhoven, the Netherlands, 1990.
- Invited plenary speaker at the 11th *Mathematical Theory of Networks and Systems (MTNS)*, Regensburg, Germany 1993.
- Invited plenary speaker at the *NATO-ASI: From Identification to Learning*, Como, Italy, Aug. 22-Sept. 3, 1994.
- Invited organizer/speaker of the minicourse "System Theoretic aspects of Dynamic Vision" at the *European Control Conference*, Rome, Sept. 1995.
- Invited organizer/speaker of the minicourse "Geometric Stochastic System Theory and Subspace Identification" at the 12th *Mathematical Theory of Networks and Systems (MTNS)* symposium, St. Louis, Missouri June 1996.
- Invited plenary speaker at the the conference on *Stochastic Differential and Difference Equations*, Győr Hungary, Aug. 1996.
- Invited speaker at the conference *The Confluence of Vision and Control*, Block Island, June 1997.
- Invited semi-plenary speaker at the conference *Mathematical Theory of Networks and Systems (MTNS-2000)*, Perpignan, France, 2000.
- Invited speaker at the conference *New Directions in Mathematical System Theory and Optimization*, Stockholm, 2002.

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- Invited plenary speaker at the the *International Workshop on Operator Theory and Applications (IWOTA-03)*, Cagliari, June 2003.
 - Invited speaker at the Workshop *Observation and Estimation*, Sde Boker, Israel, July 2004.
 - Invited plenary speaker at the the *36th International Symposium on Stochastic Systems Theory and its Applications* Tokyo, November 2004.
 - Invited semi-plenary speaker at the the conference *Mathematical Theory of Networks and Systems (MTNS-2006)*, Kyoto, Japan 2006.

Professional Activities

- Associate Editor of The Journal *SYSTEMS AND CONTROL LETTERS* (from 1980 to 1990).
- Associate Editor of the Book Series *SYSTEMS AND CONTROL, FOUNDATIONS AND APPLICATIONS*, Birkhauser, Boston.
- Associate Editor of the Book Series *PROGRESS IN SYSTEMS AND CONTROL THEORY*, Birkhauser, Boston.
- Associate Editor of the *JOURNAL OF MATHEMATICAL SYSTEMS ESTIMATION AND CONTROL*, Birkhauser, Boston (ended 1999).
- Chairman of the IFAC Technical Committee on Stochastic Systems (formerly Working Group on Stochastic Analysis in Control) since 1989. As such organized several sessions at the IFAC world congress of Tallinn (1990), Sydney (1993), San Francisco (1996) and Beijing (1999). Ended in 1999.
- Member of the Program Committe of the 1989 and 1993 International Symposium on the *Mathematical Theory of Networks and Systems (MTNS)*
- Member of the Program Committe of the SIAM Conference *Control in the 90's*, San Francisco, 1989.
- Member of the steering committee of the *International Symposium on the Mathematical Theory of Networks and Systems (MTNS)* (since 1985)
- Co-organizer (with A. Lindquist) of the Swedish-Italian Workshop on Identification, Stockholm, Sept. 1993.
- Co-organizer (with S. Bittanti) of the NATO Advanced Study Institute "From Identification to Learning", Como, Aug-Sept. 1994.
- Organizer and chair of the 4th *ERNSI European Workshop on System Identification*, Padova, June 1995.

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- Member of the international program committee of the conference on *Stochastic Differential and Difference Equations*, Győr Hungary, Aug. 1996.
 - Member of the *International Center for Space Research "G. Colombo" (CISAS)*, Padova, Italy, since 1997.
 - Chairman and Organizer of the 13th edition of the *Mathematical Theory of Networks and Systems Symposium (MTNS)*, Padova, Italy, 1998.
 - Chairman of the Steering committee of the *Mathematical Theory of Networks and Systems (MTNS)* symposium, from 1998 to 2000.
 - Member of the Administrative Council of the European Union Control Association (EUCA) from 1998 to 2004.
 - Member of the International Advisory Committee of the *31-st ISCIE Symposium on Stochastic System Theory and Its Applications (ISCIE SSS)*, Yokohama Japan, 1999.
 - Member of the international program committee of the *IFAC System Identification (SYSID)* conference, Rotterdam, Aug. 2003.
 - Member of the international program committee of the *European Control Conference (ECC-2003)*, Cambridge, U.K. Sept. 2003.
 - Member of the program and organizing committee of the Workshop *Entropy and Relative Entropy*, Padova, Italy, June 2004.
 - Member of the international program committee of the *14th IFAC Symposium on System Identification (SYSID2006)*, Newcastle, Australia, March 2006.
 - Chairman and Organizer of the 16th edition of the *ERNSI Workshop on System Identification*, Venice, Italy, 2007.
 - Member of the international program committee of the *15th IFAC Symposium on System Identification (SYSID2009)* to be held on July 6-8, 2009 in Saint Malo, France.

Significant Awards

- Fellow of the IEEE (awarded Dec 1993).
- Guest Scholar award of the Kyoto University Foundation, September-October 1994.
- Elected to the Royal Swedish Academy of Engineering Sciences, Oct. 2004.

Significant Research Grants and Industrial Projects

1. Principal investigator of *Design of single-point mooring control systems for large tankers*, 1984, contract with TECNOMARE S.p.A., Venice, Italy.
2. Principal investigator of *Design of the guidance and control system for the submersible vehicle TM 308*, 1986, contract with TECNOMARE S.p.A., Venice, Italy.
3. *Design of a high speed disk drive system based on Kalman filtering*, 1990, with CONNER Peripherals S.p.A. Ivrea, Italy.
4. Project manager and team leader of the Italian team (IT-LADSEB) for the European Research Network of Excellence *System Identification* (ERNSI), funded by the Commission of the European Communities through the Human Capital and Mobility Program (HCM), formerly SCIENCE Project, started in 1992 and concluded in 1996.
5. Principal investigator of *Guidance and Control of Autonomous Vehicles based on Computer Vision*, research grant funded by the Italian Space Agency, (A.S.I.), Rome, awarded in 1992-93-94-95-97-99, co-investigators R. Frezza, P. Perona and S. Soatto.
6. *Control of an underwater manipulator based on local image features*, 1994, TECNOMARE and SAIPEM SpA contract, co-investigator R. Frezza.
7. Project manager and team leader of the Italian team (IT-LADSEB) for the European Research Network of Excellence *System Identification* (ERNSI), funded by the Commission of the European Communities through the Training and Mobility of Researchers Program (TMR), 1997-2003.
8. National coordinator and principal investigator of the University of Padova team, of the national research project *Identification and Control of Industrial Systems* funded by the Italian Ministry of Higher Education (MURST), 1998-2000.
9. National coordinator and principal investigator of the University of Padova team, of the national research project *Identification and Adaptive Control of Industrial Systems* funded by the Italian Ministry of Higher Education (MURST), 2000-2002.
10. National coordinator and principal investigator of the University of Padova team, of the national research project *New Algorithms for the Identification and Adaptive Control of Industrial Systems* funded by the Italian Ministry of University Research (MIUR), 2002-2004.
11. Consultant for various industrial groups, among which Tecnomare S.p.A. Venice, Italy; Ferrari S.p.A. Maranello, Italy; SATE S.r.L. Venice, Italy; Salvagnini S.p.A. Vicenza, Italy; and others.

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12. General Coordinator and principal investigator of the University of Padova team, of the reasearch cluster *Robotic Vision* for the Italian Space Agency, (A.S.I.), Rome, 1999-2000-2001.
 13. General Coordinator and principal investigator of the University of Padova team, of the European Community IST project *Real-time Embedded Control of Mobile Systems with Distributed Sensing (RECSYS)*, V-th Framework Programme, 2002-2005.

Professional Interests

Probabilistic methods in Systems, Control and Signal Processing. Modeling, Estimation and Identification of systems and random signals and applications to various areas of engineering. Computer Vision and related estimation and filtering problems.

PUBLICATIONS

1. G. Marchesini and G. Picci: La valutazione della risposta libera e forzata in sistemi non lineari mediante lo sviluppo in serie di funzionali (in Italian) *Memorie della Accademia patavina di scienze lettere ed arti* Vol. **LXXX**, pp. 131-147, 1968.
2. G. Marchesini and G. Picci: Sull' identificazione funzionale di sistemi non lineari in regime periodico (in Italian) *Proceedings of the 70th AEI Conference* Rimini, Sept. 1969.
3. G. Marchesini and G. Picci: On the evaluation of the response of nonlinear systems by functional series expansion of forced and free responses, *Journal of the Franklin Institute* Vol. **288**, No. 6, pp. 469-481, 1969.
4. G. Marchesini and G. Picci: On the use of Bernoulli's equation as comparison equation in stability problems *IEEE Transactions on Automatic Control* (correspondence) Vol. **AC-14**, No. 6, pp.597-599, 1969.
5. G. Marchesini and G. Picci: On the functional identification of nonlinear systems from input-output data records *IEEE Transactions on Automatic Control* (correspondence) Vol. **AC-14**, No. 6, pp. 757-759, 1969.
6. G. Marchesini and G. Picci: On the functional identification of nonlinear systems subject to periodic inputs *Proceedings of the IFAC Symposium on System engineering approach to computer control* Kyoto, Aug. 1970.
7. G. Marchesini and G. Picci: An algebraic approach to L^∞ -stability of a class of nonlinear systems *Proceedings of the XI international FAST exhibition and symposium on automation* Milan, Nov. 1970.
8. A. Lepschy, G. Marchesini and G. Picci: A functional approach to the stability of nonlinear systems by use of comparison theorems *International Journal of Control* Vol. **11**, No. 2, pp. 293-302, 1970.
9. G. Marchesini and G. Picci: A contribution to stability analysis of nonlinear systems of functional polynomial type *Journal of the Franklin Institute* Vol. **292**, No. 2, pp. 93-108, 1971.
10. G. Marchesini and G. Picci: Some results on the abstract realization theory of multilinear systems. in *Variable Structure Systems* R. Mohler and A. Ruberti eds. (Proceedings of the first Italy-USA symposium on Variable-Structure Systems, Sorrento, Italy), Academic Press, pp. 109-135, 1972.
11. G. Picci: A probabilistic approach to identifiability in *Variable Structure Systems* R. Mohler and A. Ruberti eds, (Proceedings of the second Italy-USA symposium on Variable- Structure Systems, Portland, Oregon), *Springer Lecture Notes in Economics and Mathematical Systems*, Vol **111**, pp. 138-162, 1975.

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12. G. Picci: Stochastic realization of Gaussian processes *Proceedings of the IEEE* Vol.64, No. 1, pp 112-122, 1976.
 13. G. Picci: Some connections between the theory of sufficient statistics and the identifiability problem *SIAM Journal on Applied Mathematics* Vol.33, No. 3, pp 383-398, 1977.
 14. A. Lindquist and G. Picci: A note on the stochastic realization problem *Proceedings of the first international conference on information sciences and systems* Patras, Greece, Aug. 1976, Hemisphere publishing Co., pp. 1-5, 1977.
 15. A. Lindquist and G. Picci On the structure of minimal splitting subspaces in stochastic realization theory *Proceedings of the IEEE conference on Decision and Control*, New Orleans, Louisiana, pp.42-48, 1977.
 16. G. Picci: On the internal structure of finite-state stochastic processes in *Recent developments in Variable Structure Systems* R. Mohler and A. Ruberti eds. (Proceedings of the third Italy-USA symposium on Variable-Structure Systems, Taormina, Italy, September 1977), *Springer Lecture Notes in Economics and Mathematical Systems*, Vol 162, pp. 288-304, 1978.
 17. G. Picci: Modelli dinamici per l'identificazione (in Italian) in *Identificazione di Sistemi Stocastici*, Collana di automatica, CNR, Rome, pp. 13-70, 1978.
 18. A. Lindquist and G. Picci: A state space theory for stationary stochastic processes *Proceedings of the 21st Midwest Symposium on circuits and systems*, Ames, Iowa, 1978.
 19. A. Lindquist and G. Picci: A Hardy space approach to the stochastic realization problem *Proceedings of the IEEE Conference on Decision and Control*, San Diego, California, pp.933-939, 1978.
 20. A. Lindquist and G. Picci: On the stochastic realization problem *SIAM Journal on Control and Optimization* Vol. 17, No. 3, pp. 365-389, 1979.
 21. A. Lindquist, G. Picci and G. Ruckebusch: On minimal splitting subspaces and Markovian representation *Mathematical Systems Theory* Vol. 12, pp. 271-279, 1979.
 22. A. Lindquist and G. Picci: Realization theory for multivariable stationary Gaussian processes I : State space construction *Proceedings of the 4th International Symposium on the Mathematical theory of Networks and Systems*, Delft, Holland, Western Periodicals, pp.140-148, 1979
 23. A. Lindquist and G. Picci: Realization theory for multivariable stationary Gaussian processes II : State space theory revisited and dynamical representations of finite dimensional state spaces in *Advances in Control* D.G.Lainiotis and N.S. Tzannes eds. (Proceedings of the second International conference on Information Sciences and Systems, Patras, Greece July 1979), Reidel Dordrecht, pp. 108-129, 1980.

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24. L. Finesso and G. Picci: On the structure of minimal spectral factors *Proceedings of the 19th IEEE Conference on Decision and Control* Albuquerque, New Mexico, pp. 313-318, 1980.
 25. A. Lindquist and G. Picci: State space models for Gaussian stochastic processes in *Stochastic Systems : the Mathematics of filtering and identification and applications* M. Hazewinkel and J. C. Willems eds. (Proceedings of a 1980 NATO-Advanced Study Institute, Les Arcs, France), Reidel Dordrecht, pp. 169-204, 1981.
 26. G. Picci and S. Pinzoni: Modelli dinamici di serie temporali multivariate (in Italian) in *Identificazione Parametrica* S. Bittanti ed., CLEUP, Milano pp.187-222, 1981.
 27. G. Picci: Identificazione di serie temporali multivariate (in Italian) in *Identificazione Parametrica* S. Bittanti ed. CLEUP, Milano pp.259-310, 1981.
 28. G. Picci: Some numerical aspects of multivariable system identification *Mathematical Programming Studies*, Vol. **18**, pp. 76-101, 1982.
 29. L. Finesso and G. Picci: A characterization of minimal square spectral factors *IEEE Transactions on Automatic Control* Vol.**AC-27**, No. 1, pp. 122-127, 1982.
 30. A. Lindquist and G. Picci: On a condition for minimality of Markovian splitting subspaces *Systems And Control Letters* Vol. **1**, No. 4, pp. 264-269, 1982.
 31. A. Lindquist, S. K. Mitter and G. Picci: Toward a theory of nonlinear stochastic realization in *Feedback and Control of Linear and Nonlinear Systems* D. Hinrichsen and A. Isidori eds. *Springer Lecture Notes on Control and Information Sciences*, Vol **39**, pp. 175-189, 1982.
 32. G. Picci: The stochastic realization problem in *Sistemi Dinamici Stocastici* G. Del Grosso ed., Univ. of Rome, 1982.
 33. A. Lindquist, M. Pavon and G. Picci: Recent trends in stochastic realization theory in *Harmonic Analysis and Prediction theory, a volume dedicated to P. Masani* V. Mandrekar and H. Salehi eds. North Holland, pp. 201-224, 1983.
 34. A. Lindquist and G. Picci: Infinite dimensional stochastic realizations of continuous-time stationary vector processes in *Operator theory of Systems and Networks* H. Dym and I. Gohberg eds. (Proceedings of the Workshop on Applications of Linear Operator Theory to Systems and Networks, the Weizmann Institute, Rehovot, Israel), Birkhauser, pp.335-350, 1984.
 35. A. Lindquist, C. Martin and G. Picci: Extreme points of Riccati inequalities *IEEE Transactions on Automatic Control* (correspondence) Vol. **AC-29**, No. 11, p.1034, 1984.

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36. A. Lindquist and G. Picci: Forward and backward semimartingale representations of stationary increments processes in *Mathematical Theory of Networks and Systems* P. A. Fuhrmann ed. (Proceedings of the 6th International Symposium on the Mathematical theory of Networks and Systems, *Springer Lecture Notes on Control and Information Sciences*, Vol.58, pp. 686-724, 1984.
 37. G. Picci and J. H. van Schuppen: On the weak finite stochastic realization problem *Proceedings of the colloquium ENST-CNET "Developpements recents dans le filtrage et le controle des processus aleatoires"* Paris, France. *Springer Lecture Notes in Control and Information Sciences*, Vol.58. pp. 237-242, 1984.
 38. L. Finesso and G. Picci: Linear statistical models and stochastic realization theory in *Analysis and Optimization of Systems* A. Bensoussan and J. L. Lions eds.(Proceedings of a conference held in Nice, France), *Springer Lecture Notes in Control and Information Sciences*, Vol.62, pp. 445-470, 1984.
 39. G.B. Di Masi, L. Finesso and G. Picci: Design of an LQG controller for single point moored large tankers *Proceedings of the 23rd IEEE Conference on Decision and Control* , Las Vegas, Nevada, pp. 1663-1671, 1984.
 40. A. Lindquist and G. Picci: Forward and backward semimartingale models for stationary increments processes *Stochastics*, Vol. 15, No. 5 ,pp. 1-50, 1985.
 41. A. Lindquist and G. Picci: Realization theory for multivariate stationary Gaussian processes *SIAM Journal on Control and Optimization* (Invited Paper) Vol.23, No. 6 pp. 809-857, 1985.
 42. G. Picci: Application of stochastic realization theory to a fundamental problem of statistical physics in *Modelling, Identification and Robust Control* C. I. Byrnes, A. Lindquist eds. (Proceedings of the 7th International Symposium on the Mathematical Theory of Networks and Systems, Stockholm, Sweden), North Holland, pp. 211-258 1986.
 43. G. Picci and S. Pinzoni: Factor analysis models for stationary stochastic processes in *Analysis and Optimization of Systems* A. Bensoussan, J. L. Lions eds. (Proceedings of a conference held in Antibes, France) *Springer Lecture Notes in Control and Information Sciences*, Vol.83 pp. 411-424, 1986.
 44. G. Picci and S. Pinzoni: A new class of dynamic models for stationary time series in *Linear Systems and Time Series* . S. Bittanti ed., *Springer Lecture Notes in Control and Information Sciences*, Vol.86 pp. 69-114, 1986.
 45. G.B. Di Masi, L. Finesso and G. Picci: Design of an LQG controller for single-point moored large tankers *Automatica* Vol.22, No. 2, pp. 155-169, 1986.

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46. G. Picci and S. Pinzoni: Dynamic factor-analysis models for stationary processes *IMA Journal on Mathematics of Control and Information* Vol.3, No. 2 , pp. 185-210, 1986.
 47. G. Picci: On the identifiability of factor analysis models in *Modelling and Robust Control* C.I. Byrnes , A. Kurzhanski eds. (Proceedings of a IIASA conference held in Sopron, Hungary), *Springer Lecture Notes in Control and Information Sciences*, Vol.105 , pp. 297-317, 1987.
 48. G. Picci: Hamiltonian representation of stationary processes in *Contributions to Operator Theory and its applications* I. Gohberg, J.W. Helton, L. Rodman eds., (Proceedings of a conference held in Mesa, Arizona) Birkhauser, pp.193-215, 1988.
 49. G. Picci: Stochastic aggregation, in *Linear Circuits, Systems and Signal Processing* C.I. Byrnes, C. Martin, R. Saeks eds. (Proceedings of the 8th International Symposium on the Mathematical Theory of Networks and Systems, Phoenix, Arizona), North Holland, pp.493-501, 1988.
 50. G. Picci: Stochastic Aggregation *Proceedings of the third Italian-German Symposium on the Applications of Mathematics in Industry*, Siena, Italy, V. Boffi, H. Neunzert eds., Teubner, Kluwer pp.259-276, 1989.
 51. G. Picci: Parametrization of factor analysis models, *Journal of Econometrics* Vol. 41, No. 1 pp. 17-38, 1989.
 52. A. Lindquist and G. Picci: Stochastic Realization and the local structure of the Riccati inequality in *The Riccati Equation in Control, Systems and Signals*, S. Bittanti ed.(Proceedings of the Riccati Workshop, Como, Italy), Pitagora, Bologna, pp. 69-72, 1989.
 53. G. Picci: Aggregation of linear systems in a completely deterministic framework in *Three Decades of Mathematical System Theory. A Collection of Surveys at the Occasion of the Fiftieth Birthday of Jan C. Willems*, H. Neijmeijer, J.M. Schumacher eds., *Springer Lecture Notes in Control and Information Sciences*, Vol.135 pp. 358-381, 1989.
 54. A. Lindquist and G. Picci: On non-causal estimation, stochastic realization and the Riccati inequality *Proceedings of the 28th IEEE conference on Decision and Control*, Tampa, Florida pp.1207-1209, 1989.
 55. G. Picci and T.S.J. Taylor: Stochastic aggregation of linear Hamiltonian systems with microcanonical distribution in *Realization and modeling in system theory*, M.A. Kaashoek, J.H. van Schuppen, A.C.M. Ran eds., (Proceedings of the 9th International Symposium on the Mathematical Theory of Networks and Systems, Amsterdam, the Netherlands), Birkhauser Verlag, pp. 513-520, 1990

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56. G. Picci: A theory of dynamic aggregation by stochastic models *Proceedings of the 11-th IFAC World Congress*, Tallin, Estonia, Aug. 1990, vol 2. pp. 262-265.
57. G. Picci: Stochastic modeling and stochastic realization theory in *Mathematical System Theory: the influence of R.E. Kalman* A. Antoulas ed., Springer Verlag, pp. 213–229, 1991.
58. A. Lindquist and G. Picci: A geometric approach to modeling and estimation of linear stochastic systems *Journal of Math. Systems, Estimation and Control* vol.1, 3, pp. 241–333, 1991.
59. G. Picci and S. Pinzoni: Acausal models of stationary processes *Proc. first European Control Conference* Grenoble 1991, C. Commault et al. eds., vol 1, pp. 613–616, Hermès, Paris, 1991.
60. G. Picci and S. Pinzoni: Acausal systems and the Linear Matrix Inequality in *Recent advances in Mathematical Theory of Systems, Control, Networks and Signal Processing II*, H. Kimura, S. Kodama eds. (Proceedings of MTNS-91, Kobe 1991), pp. 209–214, Mita press, Tokyo, 1992.
61. G. Picci and T.S.J. Taylor: Stochastic aggregation of flexible mechanical structures *Recent advances in Mathematical Theory of Systems, Control, Networks and Signal Processing II*, H. Kimura, S. Kodama eds. (Proceedings of MTNS-91, Kobe 1991), pp. 203–207, Mita press, Tokyo, 1992.
62. G. Picci and J. H. van Schuppen: Stochastic realization of finite-valued processes and Primes in the Positive Matrices, in *Recent advances in Mathematical Theory of Systems, Control, Networks and Signal Processing II*, H. Kimura, S. Kodama eds. (Proceedings of MTNS-91, Kobe 1991), pp. 227–232, Mita press, Tokyo, 1992.
63. P. Perona, R. Frezza and G. Picci: Visual measurements in dynamic vision for autonomous navigation, *Proceedings of the first IARP Workshop on Robotics in space* Pisa, March 1991
64. D. Ciscato, G. Picci, R. Oboe, E. Colecchia, G.P. Maccone, G. Traversa: Optimal estimation for disk drive head positioning system *Proc 2nd Annual magnetic Recording Conference on recording Systems*, Hidden Valley, Pittsburgh PA, June 12–15, 1991.
65. G. Picci and S. Pinzoni: Irreducible representations of L^2 -signals *Proceedings of the 30th IEEE Conference on Decision and Control*, Brighton, U.K. pp. 11–12, 1991
66. G. Picci: Markovian representation of linear Hamiltonian systems, in *Probabilistic Methods in Mathematical Physics*, F. Guerra, M.I. Loffredo and C. Marchioro eds. World Scientific Singapore, pp. 358–373, 1992.

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67. G. Picci and S. Pinzoni: On feedback-dissipative systems *Journal of Math. Systems, Estimation and Control* vol.2, No. 1, pp. 1–30, 1992
 68. G. Picci Stochastic model reduction by aggregation in *Systems Models and Feedback: Theory and Applications*, A. Isidori, T.J. Tarn eds., Birkhauser Verlag, 1992, pp. 169-177.
 69. G. Picci and T.S.J. Taylor: Generation of Gaussian Processes and Linear Chaos. *Proc 31st IEEE Conf. on Decision and Control* Tucson Arizona, pp. 2125–2131, 1992.
 70. G. Picci, F. Gei and S. Pinzoni: Identification of Errors-in-Variables models with white measurement noise *Proc. second European Control Conference*, J.W. Nieuwenhuis, C. Praagman and H.L. Trentelman eds., Groningen, the Netherlands 1993, pp. 2154-2158.
 71. A. Lindquist, G. Michaletzky and G. Picci On the Connection between Splitting Subspaces and Geometric Control Theory *Proc. second European Control Conference*, J.W. Nieuwenhuis, C. Praagman and H.L. Trentelman eds., Groningen, the Netherlands 1993, pp. 1125-1131.
 72. S. Soatto, P. Perona, R. Frezza, G. Picci: Recursive motion and structure estimation with complete error characterization. In *Proc. IEEE Comput. Soc. Conf. Comput. Vision and Pattern Recogn.*, pp. 428-433, New York, 1993.
 73. R. Frezza, F. Vedana, G. Picci and P. Perona: Autonomous vision-based navigation in buildings. *Proceedings of the 1993 IFAC World Congress*, Sidney, Australia vol. 7, pp. 321-324 (1993).
 74. A. Lindquist and G. Picci: On "subspace methods" identification, in *Systems and Networks, Mathematical Theory and Applications,II*, U. Helmke and R. Mennicken eds, pp. 315-320, Akademie Verlag, Berlin, 1994.
 75. G. Picci and S. Pinzoni: Identification of Factor Analysis Models, in *Systems and Networks, Mathematical Theory and Applications,II*, U. Helmke and R. Mennicken eds, pp. 421-424, Akademie Verlag, Berlin, 1994.
 76. G. Picci, J. van der Hof and J. H. Van Schuppen: Positive Linear Algebra for Stochastic Realization of Finite-valued Processes, in *Systems and Networks, Mathematical Theory and Applications,II*, U. Helmke and R. Mennicken eds, pp. 425-428, Akademie Verlag, Berlin, 1994.
 77. G. Picci and S. Pinzoni: Acausal Models and Balanced realizations of stationary processes *Linear Algebra and its Applications* (special issue on Systems Theory), vol. **205-206**, pp. 957-1003, 1994.
 78. A. Lindquist and G. Picci: On "subspace methods" identification and stochastic model reduction, *Proceedings of the 10th IFAC Symposium on System Identification, SYSID 94*, Copenhagen, Denmark, Mogens Blanke et al. eds, vol. **2**, pp. 397-403, 1994

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