

Curriculum vitae

Dati personali

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Attività accademiche e formazione

1975-1978	Assegno di formazione scientifica e didattica del Ministero della Pubblica Istruzione presso la Facoltà di Ingegneria dell'Università degli Studi di Napoli
1978-1981	Professore incaricato di Servomeccanismi e Automazione presso la facoltà di Ingegneria dell'Università degli Studi di Napoli
1981-1985	Ricercatore Universitario presso il Dipartimento di Informatica e Sistemistica, Università degli Studi di Napoli Federico II
1985-1991	Professore Associato di Controlli Automatici presso il Dipartimento di Informatica e Sistemistica, Università degli Studi di Napoli Federico II
1992-1994	Professore Associato di Controlli Automatici presso la Facoltà di Ingegneria della Seconda Università degli Studi di Napoli
1994-at pres.	Professore Ordinario di Controlli Automatici presso il Dipartimento di Ingegneria dell'Informazione, Seconda Università degli Studi di Napoli
1987-1991	Professore supplente di Controlli Automatici presso la Facoltà di Ingegneria dell'Università degli Studi di Salerno
1992-1993	Professore supplente di Controlli Automatici presso la Facoltà di Ingegneria dell'Università degli Studi di Siena

Attività manageriali

1986-1990	Membro della giunta del Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Napoli Federico II
1991-1993	Membro del Comitato Ordinatore della Facoltà di Ingegneria dell'Università degli Studi di Siena
1996-2006	Direttore del Dipartimento di Ingegneria dell'Informazione, Seconda Università degli Studi di Napoli
2006-at pres.	Membro della giunta del Dipartimento di Ingegneria dell'Informazione, Seconda Università degli Studi di Napoli
2007-at pres.	Direttore del Centro Servizi Informatici (CSI) di Ateneo per la Didattica e la Ricerca della Seconda Università degli Studi di Napoli

Formazione

1973	Laurea in Ingegneria Elettronica conseguita presso l'Università degli Studi di Napoli
1974	Abilitazione alla professione di Ingegnere



Attività Accademica

1984-1991	Membro del Collegio dei Docenti del Dottorato in Ingegneria Elettronica – Università di Napoli Federico II
1992-at pres.	Coordinatore del Laboratorio di Controlli Automatici - Dipartimento di Ingegneria dell'Informazione - Seconda Università di Napoli
1992-at pres.	Membro del Collegio dei Docenti del Dottorato in Ingegneria Elettronica – Seconda Università di Napoli
1998-at pres.	Supervisore studenti di dottorato presso la Seconda Università di Napoli
1986	Membro della commissione del concorso nazionale per professore associato
1992	membro della commissione per l'esame finale per il conseguimento del dottorato di ricerca presso l'Università di Roma "Tor Vergata"
1999-2006	Membro della Commissione di concorso a professore Ordinario presso l'Università di Pisa, Università di Cassino, Politecnico di Milano
2004-2005	Membro della Commissione di concorso a posti di ricercatore presso l'Università di Roma Tor Vergata e Università Mediterranea di Reggio Calabria
2006	membro della commissione per l'esame finale per il conseguimento del dottorato di ricerca presso l'Università di Palermo
2000-2008	Presidente della Commissione di concorso a posto di ricercatore presso la Seconda Università degli Studi di Napoli

Coordinamento Progetti di ricerca e cooperazione internazionale

1993-1995	Local Scientific Coordinator of the strategic project funded by the National Research Council "Adaptive and Robust Control"
1993-1995	Local Scientific Coordinator of the project: "Guida e Controllo di Veicoli Orbitanti nelle fasi di Rendez-vous e Docking" funded by Italian Space Agency, in collaboration with University of Napoli Federico II and C.I.R.A.
1997-1999	Local Scientific Coordinator of the project (PRIN): "Ingegneria del Controllo" funded by Italian Ministry of University and Research
1997-1999	Scientific Coordinator of the P.O.P. project: "Active Control of Acoustic Noise" funded by Campania Region
1999-2002	Scientific Coordinator of the project: "Esperto di progettazione e gestione di servizi per enti pubblici, aziende e associazioni basati sull'impiego di reti Internet ed Intranet", funded by Italian Ministry of University and Research under the call P.O. "Ricerca, Sviluppo Tecnologico ed Alta Formazione"
2000-2003	Local Scientific Coordinator of the FP5 project MESA (Magnetostrictive Equipment and Systems for more electric Aircraft), workpackage leader of WP5 (Control and Power Algorithms and Hardware). In collaboration with: Saarland University (Coordinator) (d), ZF Luftfahrttechnik GmbH (D), University of Napoli Federico II (I), Finmeccanica S.P.A. (I), Kungliga Tekniska Hogskolan (KTH) (S), Ericsson Saab Avionics (S), TACT Technology Ltd (IRL), Newlands Technology Limited (UK), University of Salford (UK), Cedrat Recherche (F), Institute National Polytechnique de Grenoble (F)
2001-2002	Local Scientific Coordinator of the project (PRIN): "Innovative Controls in High Speed Transport Systems" funded by Italian Ministry of University and Research
2003-2005	Scientific Coordinator of the National project (PON): "Laboratorio integrato multidisciplinare per lo sviluppo, caratterizzazione e controllo di smart materials per applicazioni industriali ed ambientali". Call 68/2002
2003-2006	Local Scientific Coordinator of the FP6 project MESEMA (Magnetoelastic Energy Systems for Even More Electric Aircraft), workpackage leader of WP2 (Noise and Vibration Control). In collaboration with: University of Napoli Federico II (I) (Coordinator), Saarland University (D), Alenia Aeronautica S.P.A. (I), EADS Deutschland GmbH (D), ZF Luftfahrttechnik GmbH (D), TACT Technology Ltd (IRL), Cedrat Recherche (F), Chalmers University of Technology (S),

- EUROCOPTER Deutschland GmbH (D), National Institute of Research and Development for Technical Physics (RO), Kungliga Tekniska Hogskolan (KTH) (S), Laboratory of Fluid Mechanics and Energy (GR), Newlands Technology Limited (UK), Paragon Ltd (GR), University of Salford (UK)
- 2008-2011 Local Scientific Coordinator of the FP7 Large-scale Integrating Project DEXMART (Dexterous and autonomous dual-arm/hand robotic manipulation with smart sensory-motor skills: a bridge from natural to artificial cognition), workpackage leader of WP1 (Observation and learning from humans). In collaboration with: University of Napoli Federico II (I) (Coordinator), CNRS LAAS (F), DLR (D), FZI University of Karlsruhe (D), University of Bologna (I), Saarland University (D)
- 2009-2012 Participation to the FP7 Large-scale Integrating Project ECHORD (European Clearing House for Open Robotics Development), in collaboration with Technische Universität München (D) (Coordinator), Università degli Studi di Napoli Federico II (I), Universidade de Coimbra (E)
- 2012 Participation to the FP7 Large-scale Integrating Project SAPHARI (Safe and Autonomous Physical Human-Aware Robot Interaction), in collaboration with Università degli Studi di Roma La Sapienza (I) (Coordinator), DLR (D), EADS (F), Fondazione Istituto Italiano di Tecnologia (I), Fraunhofer Institute (D), KUKA Laboratories (D), CNRS LAAS (F), Technical University of Munich (D), Università degli Studi di Napoli Federico II (I), Università degli Studi di Pisa (I)
- 2012 Participation to the FP7 Large-scale Integrating Project LOCOMACHS (LOW COST Manufacturing and Assembly of Composite and Hybrid Structures), coordinated by SAAB AKTIEBOLAG (S) with cooperation of 31 partners, among them: Alenia-Aermacchi, Airbus, Dassault Aviation, EADS, DLR.

Attività di revisione

Journals peer reviewing

IEEE Trans. on Automatic Control, Automatica, International Journal of Control, Control System Technology, Transactions of the ASME Journal of Dynamic Systems Measurement and Control, European Journal of Control.

Attività di ricerca

Industrial Electronics: modulation processes in power converters

Industrial Robotics: adaptive and robust control, inverse kinematics

Robust Control: VSS, sliding mode approach

Guidance, Navigation and Control: attitude control, robust stability, fault tolerance

Active Noise and Vibration Control of Flexible Structures: modelling, identification, control, smart actuators

Robotic Manipulation: tactile/force/angular sensors, slipping detection and avoidance

Lavori su riviste internazionali

1. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Slipping detection and avoidance based on Kalman filter", *Mechatronics*, vol. 24, Issue 5, 2014, Pages 489-499.
2. A. Cirillo, P. Cirillo, G. De Maria, C. Natale, S. Pirozzi, "An artificial skin based on optoelectronic technology", *Sensors and Actuators A: Physical*, vol. 212, p. 110-122, 2014, ISSN: 0924-4247.
3. G. Palli, C. Melchiorri, G. Vassura, U. Scarcia, L. Moriello, G. Berselli, A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, C. May, F. Ficuciello, B. Siciliano, "The DEXMART hand: Mechatronic design and experimental evaluation of synergy-based control for human-like grasping", *The International Journal of Robotics Research*, vol. 33, n. 5, pp. 799-824, 2014.
4. G. De Maria, C. Natale, S. Pirozzi, "Tactile data modelling and interpretation for stable grasping and manipulation", *Robotics and Autonomous Systems*, vol. 61, n. 9, pp. 1008-1020, 2013.
5. A. Cavallo, A. Di Nardo, G. De Maria, M. Di Natale, "Automated fuzzy decision and control system for reservoir management", *Journal of Water Supply: Research and Technology—AQUA*, vol. 62, no. 4, pp. 189-204, 2013.
6. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Classes of Strongly Stabilizing Bandpass Controllers for Flexible Structures", *Advances in Acoustics and Vibration*, Vol. 2012, doi:10.1155/2012/249478, 2012.
7. G. De Maria, P. Falco, C. Natale, S. Pirozzi, "Data fusion based on optical technology for observation of human manipulation", *Int. Journal of Optomechatronics*, Taylor & Francis, vol. 6, no. 1, March 2012.
8. G. De Maria, C. Natale, S. Pirozzi, "Force/tactile sensor for robotic applications", *Sensors and Actuators A: Physical*, Elsevier Science B.V., Amsterdam, NL, doi:10.1016/j.sna.2011.12.042, 2012.
9. A. D'Amore, G. De Maria, L. Grassia, C. Natale, S. Pirozzi, "Silicone rubber-based tactile sensor for measurement of normal and tangential components of the contact force", *Journal of Applied Polymer Science*, Wiley Periodicals, Inc., vol. 122, pp. 3758-3770, 2011.
10. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Optoelectronic joint angular sensor for robotic fingers", *Sensors and Actuators A: Physical*, vol. 152, p. 203-210, 2009, ISSN: 0924-4247.
11. A. Cavallo, D. Davino, G. De Maria, C. Natale, S. Pirozzi, C. Visone, "Hysteresis compensation of smart actuators under variable stress conditions", *Physica B, Condensed Matter*, vol. 403, p. 261-265, 2008, ISSN: 0921-4526.
12. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Robust Control of Flexible Structures with Stable Bandpass Controllers", *Automatica*, vol. 44, p. 1251-1260, 2008, ISSN: 0005-1098.
13. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Gray-box Identification of Continuous-time Models of Flexible Structures", *IEEE Transactions on Control Systems Technology*, vol. 15, p. 967-981, 2007, ISSN: 1063-6536.
14. A. Cavallo, G. De Maria, R. Setola, "A Sliding Manifold Approach for Vibration Reduction of Flexible Systems", *Automatica*, vol. 35, p. 1689-1696, 1999, ISSN: 0005-1098.
15. A. Cavallo, G. De Maria, P. Nistri, "Robust Control Design with Integral Action and Limited Rate Control", *IEEE Transactions on Automatic Control*, vol. 44, p. 1569-1572, 1999, ISSN: 0018-9286.
16. A. Cavallo, G. De Maria, P. Nistri, "A Sliding Manifold Approach to the Feedback Control of Rigid Robots", *International Journal of Robust and Nonlinear Control*, vol. 6, p. 501-516, 1996, ISSN: 1049-8923.
17. A. Cavallo, G. De Maria, F. Ferrara, "Attitude Control for Low Lift/Drag Reentry Vehicles", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 19, No. 4, 1996.

18. A. Cavallo, G. De Maria, "Algorithm for Simultaneous Stabilization of a collection of Single-Input Plants", *Int. Jour. on System Science*, Vol. 20, No. 3, 1994.
19. A. Cavallo, G. De Maria, P. Nistri, "Some control problems solved via a sliding manifold approach", *Differential Equations and Dynamical Systems*, Vol. 1, No. 4, 1993.
20. A. Cavallo, G. De Maria, L. Verde, "Robust Flight Control System: a Parameter Space Design", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 15, No. 5, 1992.
21. A. Cavallo, G. Celentano, G. De Maria, "Robust Stability Analysis with Linearly Dependent Coefficient Perturbations", *IEEE Trans. on Automatic Control*, Vol. 36, No. 3, 1991.
22. G. Celentano, G. De Maria, "Positive Linear Parametrization of Polynomials with Zeros in Prescribed regions", *Int. Jour. on System Science*, vol. 16, n. 4, p. 47-56, 1990.
23. G. Celentano, G. De Maria, "A new linear parametrization of all stabilizing compensators for single input single output plants", *Proc. IEE Part D*, vol. 136, n. 5, 1989.
24. A. Balestrino, G. De Maria, L. Sciavicco, B. Siciliano, "An algorithmic approach to coordinate transformation for robotic manipulators", *Advanced Robotics*, vol. 2, 1988.
25. A. Balestrino, G. De Maria, A. Zinober, "Nonlinear adaptive model following control", *Automatica*, vol. 20, n. 5, p. 559-568, 1984.
26. G. Ambrosino, G. De Maria, F. Garofalo, "Discontinuous adaptation laws for MRAC using only input and output measurements", *Ricerche di Automatica*, vol. 13, n. 2, p. 219-241, 1982.
27. A. Balestrino, G. De Maria, L. Sciavicco, "Feedback and feedforward in adaptive model following control for a class of nonlinear time-varying plants", *Ricerche di Automatica*, vol 13, n. 2, p. 218-228, 1982.
28. A. Balestrino, G. De Maria, L. Sciavicco, "An adaptive model following control for robotic manipulators", *Trans. of the ASME, Journal of Dynamic System Measurements and Control*, vol. 105, p. 143-151, 1983.
29. A. Balestrino, G. De Maria, L. Sciavicco, "Hyperstable adaptive model following control of nonlinear plants", *Systems & Control Letters*, vol. 1, n. 4, p. 232-236, 1982.
30. A. Balestrino, G. De Maria, L. Sciavicco, "Adaptive model following control systems for a class of nonlinear multivariable plants", *Ricerche di Automatica*, vol. 11, n. 2, p. 95-110, 1980.
31. G. De Maria, L. Sciavicco, "Pull-in range determination for a class of phase-locked loops", *IEEE Trans. On Industrial Electronics and Control Instrumentation*, vol. IECI-28, n. 4, p. 359-363, 1981.
32. G. De Maria, L. Sciavicco, "On the dynamic behavior of phase-locked loops", *Ricerche di Automatica*, vol. 11, n. 1, p. 359-363, 1980.
33. G. De Maria, L. Sciavicco, "Analysis and design of pulse ratio modulated feedback control systems", *IEEE Trans. On Industrial Electronics and Control Instrumentation*, vol. IECI-26, n. 3, p. 166-172, 1979.
34. A. Balestrino, G. De Maria, "Matrix representation of a transformation of polynomials generated by a bilinear transformation", *Ricerche di Automatica*, vol. 9, n. 1, p. 34-42, 1978.
35. A. Balestrino, G. De Maria, L. Sciavicco, "Analysis of modulation processes in power converters", *Proc. IEE*, vol. 125, n. 5, p. 411-412, 1978.

Libri e capitoli di libri

1. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Active control of flexible structures – From modelling to implementation", *Springer AIC*, vol. 14, p. 1-195, 2010, ISBN: 978-1-84996-280-3

International Book Chapters

1. G. Palli, C. Melchiorri, G. Vassura, G. Berselli, S. Pirozzi, C. Natale, G. De Maria, C. May, "Innovative Technologies for the Next Generation of Robotic Hands", *Advanced Bimanual Manipulation*, Springer Tracts in Advanced Robotics 80, p. 173-214, ISBN: 978-3-642-29040-4, 2012.
2. G. De Maria, C. Natale, S. Pirozzi, "The sensing apparatus of a tendon-driven robotic hand", *Control themes in hyperflexible robotic workcells*, p. 163-181, CUES, 2010, ISBN: 978-88-95028-39-2.
3. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Minimally invasive force sensing for tendon-driven robots", *Cutting Edge Robotics*, vol. 1, p. 379-394, 2009, ISBN: 978-953-307-062-9.
4. G. De Maria, A. Minardo, C. Natale, S. Pirozzi, L. Zeni, "Optical fibres in aeronautics, robotics and civil engineering", *Optical Fibre, New Developments*, Aleksandar Lazinica Ed., IN-TECH, p. 17-34, 2009.
5. A. Cavallo, G. De Maria, C. Natale, "High Order Sliding Manifold Control for Vibration Reduction in Flexible Structures", in J. Allan, R.J. Hill, C.A. Brebbia, G. Sciutto and S. Sone (Eds.) *Computers in Railways VIII*, WIT Press, UK, 2002.
6. A. Cavallo, G. De Maria, "Reentry Control for Low L/D Vehicles", in S. Sivasundaram (Ed.), *Nonlinear Problems in Aeronautics and Astronautics*, Gordon and Breach Science Publisher, USA, 1998.
7. A. Cavallo, G. De Maria, L. Verde, "Robustness against Aerodynamic Parameter Uncertainties in Flight Control Systems", in P. Borne, G. Tzafestas, N.E. Radhy (Eds.) *Mathematics of the Analysis and Design of Process Control*, Elsevier Science Publishers, 1992, IMACS.
8. A. Cavallo, G. De Maria, L. Verde, "Robust Parameter Design of Flight Control Systems", in R. Whalley (Ed.), *Application of Multivariable System Techniques*, Elsevier Applied Science, London, UK, 1990.

Brevetti

1. A. D'Amore, G. De Maria, L. Grassia, C. Natale, S. Pirozzi, (2011), "Sensor for measuring an external force applied to said sensor", EP11425148.1.
2. A. D'Amore, G. De Maria, L. Grassia, C. Natale, S. Pirozzi, (2010), "Sensore per la misura di una forza esterna applicata a detto sensore", RM2010A000304.

Lavori su atti di conferenze internazionali

1. A. Cirillo, G. De Maria, C. Natale, S. Pirozzi, "A Mechatronic Approach for Robust Stiffness Estimation of Variable Stiffness Actuators", 2013 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Wollongong, AU, July, 2013.
2. A. Cirillo, P. Cirillo, G. De Maria, C. Natale, S. Pirozzi, "A Proximity/Contact-Force Sensor for Human Safety in Industrial Robot Environment", 2013 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Wollongong, AU, July, 2013.
3. G. Palli, S. Pirozzi, C. Natale, G. De Maria, C. Melchiorri, "Mechatronic Design of Innovative Robot Hands: Integration and Control Issues", 2013 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Wollongong, AU, July, 2013.
4. G. De Maria, C. Natale, S. Pirozzi "Slipping Control Through Tactile Sensing feedback", 2013 IEEE RAS International Conference on Robotics and Automation, Karlsruhe, May 2013.
5. G. De Maria, C. Natale, S. Pirozzi "Tactile Sensor for Human-like Manipulation", The Fourth IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics, Rome, June 2012.

6. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "A Class of Strongly Stabilizing Bandpass Controllers for Flexible Structures", *18th IFAC World Congress*, Milan, August 2011.
7. F. Corato, G. De Maria, P. Falco, C. NATALE, "Naturalness criterion for robot hand motion", *1st International Conference on Applied Bionics and Biomechanics ICABB-2010*, Venezia, Oct. 2010.
8. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "An Advanced System for Vibration Control of Flexible Structures", *17th IFAC World Congress*, Seoul, July 2008.
9. G. De Maria, A. Minardo, C. Natale, S. Pirozzi, L. Zeni, "Optoelectronic tactile sensor based on micromachined scattering wells", *Proc. of the First Mediterranean Photonics Conference*, Ischia - Italy, p. 25-28 June 2008.
10. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "On Scaling Matrices Optimal Selection for H2 Strongly Stabilizing Bandpass Controllers", *46th IEEE Conference on Decision and Control*, New Orleans, December 2007.
11. A. Cavallo, D. Davino, G. De Maria, C. Natale, S. Pirozzi, C. Visone, "Hysteresis compensation of smart actuators under variable stress conditions", *6th International Symposium on Hysteresis and Micromagnetic Modeling HMM 2007*, Salamanca, E, June 2007.
12. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, " H_{∞} Strongly Stabilizing Bandpass Controllers for Flexible Systems", *45th IEEE Conference on Decision and Control*, San Diego, CA, December 2006.
13. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Model identification and optimal H2 vibration control of an aeronautical panel", *The 6th International Symposium on Active Noise and Vibration Control ACTIVE 2006*, Adelaide, Australia, September 2006.
14. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, "Smart Magnetostrictive Devices for Active Control", *International Conference on Advanced Materials and Technologies for the Transportation Industry*, Pomigliano d'Arco (NA), Italy, October 2005.
15. A. Cavallo, G. De Maria, C. Natale, S. Pirozzi, C. Dodaro, A. Renda, "Smart Magnetostriction-based Devices in Surgery", *17th SMIT Conference*, Napoli, Italy, September 2005.
16. A. Cavallo, G. De Maria, C. Natale, "Limit Cycles in Feedback Control Systems with Hysteresis", *Proc. of the 16th IFAC World Congress*, Prague, Czech Republic, July 2005.
17. G. Aurilio, G. De Maria, C. Natale, "Modal Analysis and vibration control of a fuselage aeronautical panel", *Proc. 2nd IFAC Conference on Mechatronic Systems*, Berkeley, December 2002, p. 129-134.
18. A. Cavallo, G. De Maria, C. Natale, "Second Order Sliding Manifold Approach for Vibration Reduction via Output Feedback: Experimental Results", *IEEE/ASME International Conference on Advanced Intelligent Mechatronics*, pp. 725-730, Como, I, 2001.
19. A. Cavallo, G. De Maria, "Robust Active Control of Flexible Systems with Second Order Sliding", *Proc. of the 1999 IEEE/ASME Conference on Advanced Intelligent Mechatronics*, settembre 1999, Atlanta (USA).
20. A. Cavallo, G. De Maria, E. Leccia, R. Setola, "Robust Control of a DC9 Aircraft Frame", *Proc. of the 37th IEEE Conference on Decision and Control*, Dicembre 1998, Tampa (USA).
21. A. Cavallo, G. De Maria, E. Leccia, R. Setola, "A Robust Controller for Active Vibration Control of Flexible Systems", *Proc. of the 36th IEEE Conference on Decision and Control*, Dicembre 1997, San Diego (USA).
22. A. Cavallo, G. De Maria, R. Setola, "Vibration Control of Flexible Systems Via Sliding Manifold Approach", *2nd IFAC Symposium of Robust Control Design, ROCOND 97*, June 1997, Budapest (Hungary).
23. A. Cavallo, G. De Maria, R. Setola, "Sliding Manifold Approach to Vibration Control of Flexible Systems subject to Narrow-Band Disturbances", *4th European Control Conference ECC97*, June 1997, Brussel (Belgium).



24. A. Cavallo, G. De Maria, "Limited Rate Control with a Singular Perturbation Approach", *4th European Control Conference ECC97*, June 1997, Brussel (Belgium).
25. A. Cavallo, G. De Maria, "Attitude Control for Large Angle Maneuvers", *IEEE International Workshop on Variable Structure Systems VSS96*, December 1996, Tokio (Japan).
26. A. Cavallo, G. De Maria, F. Ferrara, E. Filippone, "A Trajectory and Attitude Control Strategy for the CRV/CTV Atmospheric Re-entry", Paper No. AIAA 96-3703, *AIAA Guidance, Navigation and Control Conference*, July 1996, San Diego (USA).
27. A. Cavallo, G. De Maria, P. Nistri, "Sliding Mode Techniques with Robust Observers", *IEEE Workshop on Robust Control via Variable Structure & Lyapunov Techniques VSLT94*, September 1994, Benevento, Italy.
28. A. Cavallo, G. De Maria, P. Nistri, "Robust LQ Design by a Sliding Manifold Approach", *IFAC Workshop on New Trends in Design of Control Systems*, September 1994, Smolenice, Slovenia.
29. A. Cavallo, G. De Maria, P. Marino, F. Vasca, "Pulse Ratio Modulator Design via Sliding Mode Approach", *Proc. of the IEEE Symposium on Industrial Electronics*, May 1994, Santiago, Chile.
30. A. Cavallo, G. De Maria, F. Ferrara, P. Nistri, "A Sliding Manifold Approach to Satellite Attitude Control", *Proc. of the 12th IFAC World Congress*, July 1993, Sydney, Australia.
31. A. Cavallo, G. De Maria, P. Nistri, "Linear Tracking Problems by a Sliding Manifold Approach", *Proc. of the 2nd European Control Conference*, 28 Giugno-1 Luglio 1993, Groningen, The Netherlands.
32. A. Cavallo, G. De Maria, P. Nistri, "Nonlinear Tracking Problems by a Sliding Manifold Approach", *Proc. of the IEEE Mediterranean Symp. on New Directions in Control Theory and Applications*, June 1993, Creta, Greece.
33. A. Cavallo, G. De Maria, "A Note on Computing the Minimum Distance between Lyapunov Functions", *Proc. of the 31st IEEE Conference on Decision and Control*, 16-18 December 1992, Tucson (USA).
34. A. Cavallo, G. De Maria, V. De Nicola, F. Ferrara, "A Re-entry Capsule Control System Design for Microgravity Experiments", *Proc. del 12th IFAC Symposium on Automatic Control in Aerospace*, September 1992, Ottobrunn, Germany.
35. A. Cavallo, G. De Maria, P. Marino, "Simulation Model for Cathalytic Monopropellant Hydrazine Thrusters", *Proc. of the IFAC Syposium on Intelligent Components and Instruments for Control Applications SICICA'92*, May 1992, Malaga, Spain.
36. A. Cavallo, G. De Maria, "A Polynomial Approach to Simultaneous Stabilization of SISO Plants", *Proc. of the 30th IEEE Conference on Decision and Control*, December 1991, Brighton, UK.
37. A. Cavallo, G. De Maria, L. Verde, "Sensitivity Minimization with Pole Assignment in SISO Systems", *Proc. of the 29th IEEE Conference on Decision and Control*, December 1990, Honolulu, Hawaii, USA.
38. A. Cavallo, G. Celentano, G. De Maria, "Robust Controller Design of Uncertain Linear Time Invariant SISO Plants", *Proc. of the 11th World Congress of the IFAC*, August 1990, Tallin, Estonia.
39. A. Cavallo, G. De Maria, L. Verde, "Robust Analysis of handling qualities in Aerospace Systems", *Proc. of the 11th World Congress of the IFAC*, August 1990, Tallin, Estonia.
40. A. Cavallo, G. De Maria, L. Verde, "Parameter Space Design of Robust Flight Control Systems", *50th Symposium of the Guidance and Control Panel AGARD*, May 1990, Cesme, Turkey.
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