Paolo Paoletti – Curriculum vitae

Personal information

Name: Paolo Paoletti
Address: Department of Mechanical, Materials and Aerospace Engineering, School of Engineering, University of Liverpool, Brownlow Hill, Liverpool L69 3GH
E-mail: P.Paoletti@liverpool.ac.uk
Web: http://pcwww.liv.ac.uk/~paoletti/

Employment history

Oct 2017 – present: **Senior Lecturer** in Control
School of Engineering, University of Liverpool (UK)
Oct 2012 – Oct 2017: **Lecturer** in Control
School of Engineering, University of Liverpool (UK)
Jul 2010 – Jul 2012: **Postdoctoral fellow**
School of Engineering and Applied Sciences, Harvard University (USA)
Advisor: Prof L.Mahadevan
Jan 2010 – Jun 2010: **Postdoctoral fellow**
Institute for Complex Systems, National Research Council (Italy)
Advisor: Dr B.Tiribilli

Visiting positions

Feb 2018: **Visiting Scientist**
Institute for Complex Systems, National Research Council, Italy
July 2016: **Visiting Scientist**
Institute for Complex Systems, National Research Council, Italy
Sep 2012: **Visiting Professor**
National Center for Biological Sciences, Bangalore (India)
Jul – Oct 2009 and Oct 2008 – Apr 2009: **Short term scholar**
School of Engineering and Applied Sciences, Harvard University (USA)

Education and training

2015 – present: **Fellow of the Higher Education Academy**
2007 – 2009: **PhD** in "*Nonlinear Dynamics and Complex Systems*"
University of Florence (Italy)
Thesis: "Modelling *and control of dynamical systems via variational calculus"*
2004 – 2006: **Master Degree** in *Automation Engineering*
University of Florence (Italy)
Thesis: "*Analysis and characterization of Atomic Force Microscopy self-oscillating dynamics"*
Valuation: 110/110 cum laude
2001 – 2004: **Bachelor Degree** in *Electronic Engineering*
University of Florence (Italy)
Thesis: "*Real-time supervision and control of a Magnetic Levitation Process"*
Valuation: 110/110 cum laude

Research Funding

2020-21: EPSRC (co-PI)
Project: *"Manufacturing of 3D-printed morphing origami solar sails for next generation of CubeSats"*
Value: £60,000

2020: Department for Transport (PI)
Project: *"Shape-Pot – Automated characterisation of potholes"*
Value: £30,000

2020: UoL-Sensor City Innovation Voucher (PI)
Project: *"Use of sensors to monitor sleep position to allow identifying of risks and enable prevention of musculoskeletal pathology"*
Value: £7,000

2019-21: EPSRC (PI)
Project: *"BEST-Man - Bespoke Evolving Smart Technology for Manufacturing"*
Value: £300,000

2019-21: Royal Society (PI)
Project: *"Flex-Handling: advanced soft sensing and control in soft grippers for flexible materials handling"*
Value: £12,000

2019: ISCF pump-priming fund (co-PI)
Project: *"Internet-of-Things for unlocking urban farming"*
Value: £16,000

2019: ISCF pump-priming fund (co-PI)
Project: *"Can 3D motion capture cameras diagnose hip dysplasia in new-borns?"*
Value: £14,300

2019: RAEng Frontiers of Engineering Seed Funding (co-PI)
Project: *"Development of Low-cost Remote Health Diagnostic/Monitoring Systems for Low-income Countries"*
Value: £26,000

2018: ODA seed funding (PI)
Project: *"Assistive/rehabilitation device for impaired hands using soft robotics"*
Value: £4,500

2017-19: InnovateUK (co-I)
Project: *"Combined Laser Additive Manufacturing and Subtractive Surface Finishing"*
Value: £1.8M of which £140,000 at Liverpool

2016-17: EPSRC First Grant (PI)
Project: *"START - Self-Tuning Advanced Rheology Tool"*
Value: £123,000

2016-19: PhD studentship by Apadana Management 3 Ltd (PI)
Project: *"UNFRAME3D - UNconstrained FRameless Autonomous Manufacturing for unstructured Environments in 3D"*
Value: £69,000

2016-19: H2020 Industry 2020 in the Circular Economy (co-PI)
Project: *"ENCOMPASS – ENgineering Compass"*
Value: €4M of which €258,000 at Liverpool

2016-17: RAEng Frontiers of Engineering Seed Funding (PI)
Project: *"Towards an autonomous sensing platform for pollution monitoring"*
Value: £20,000

2016-17: RAEng Frontiers of Engineering Seed Funding (PI)
Project: *"Autoturtle - Auto unfold solar turtle"*
Value: £20,000

2016: HEIF Impact Acceleration Fund (PI)
Project: *"Advanced soft robotics for healthcare and autonomous systems"*
Value: £6,500

2016: Short Term Mobility travel grant (co-PI)
Project: *"Non-linear behaviour of self-excited microcantilevers in viscous fluids"* – short visit to Dr Tiribilli's lab (Institute for Complex Systems, National Research Council, Italy)
Value: €2,100

2015-19: PhD studentship by Jaguar Land Rover (PI)
Project: *"Optimal dynamic control of advanced diesel engines"*
Value: £100,000

2015: Santander travel award (PI)
Project: *"Understanding human biomechanics"* – short visit to Dr Venkadesan's lab (Yale University, USA)
Value: £1,000

2014: Pump-priming voucher (PI)
Project: *"A test bed for validation of robotic coordination algorithms"*
Value: about £10,000 (7 E-pucks robots)

2014: Knowledge Exchange Voucher (PI)
Title: "*A low cost integrated platform for AFM spectroscopy*"
Partner: DSoFt Solutions Ltd
Value: £4,000

Teaching (selected)

2017 – present: **Module lecturer** for *Life in Motion*, 3rd Year, University of Liverpool
2016 – present: **Module designer and lecturer** for *Electromechanical Systems*, 1st Year, University of Liverpool
2015 – present: **Module lecturer** for *Musculoskeletal Biomechanics*, 4th Year and MSc, University of Liverpool
2015 – present: **Module coordinator** for *Solids and Structures 2*, 2nd year, University of Liverpool
2014 – 2015: **Module lecturer** for *Solids and Structures 2*, 2nd year, University of Liverpool
2014 – present: **Module moderator** for *Biomedical Engineering*, 3rd year, University of Liverpool
2013 – present: **Module coordinator** for *Mechatronics*, 3rd Year, University of Liverpool
2013 – present: **Tutor** for 1st Year students; **Supervisor** for several Undergraduate Final Year Projects, MSc theses and Ph.D students.
May – Jul 2012: **Tutor** for summer undergraduate student project on "*Linkages and origami"* Harvard University (USA).

Administrative duties and other roles

2019 – present: **School Director for Postgraduate Research**, School of Engineering
2018 – present: **Academic lead** for Robotics laboratory at the School of Engineering
2018 – 20019: **Head of Admissions and Recruitment**, School of Engineering
2016 – present: **Member** of the Leverhulme Research Centre for Functional Materials Design University of Liverpool (UK)
2014 – present: **Member** of the Institute for Risk and Uncertainty University of Liverpool (UK)
2014 – present: **Advisory board** member, **Leader** of "Cooperation & coordination" research theme

and **N8 Liaison Committee** member, Centre for Autonomous Systems Technologies;
2014 – 2016: **Steering group** member of the Bio-Inspire initiative between the University of Liverpool and Knowsley Park;
2013 – present: **Member** of the Centre for Autonomous Systems Technologies University of Liverpool (UK)
2013 – 2019: **Admission Tutor** for Mechanical Engineering and Engineering programmes;
2013 – 2019: Member of the School of Engineering **Recruitment and Admission group**;
2013 – 2018: **Safety Champion** for the Dynamics and Control lab, overseeing safety for research and undergraduate projects hosted in such lab;
2013 – 2015: member of the **Learning & Teaching workgroup**, Faculty of Science and Engineering, University of Liverpool;
2013 – 2014: member of the **Mechanical Engineering review panel**, School of Engineering.

Invited talks (selected, last 5 years)

The virtue of being "soft": examples from nature and opportunities for engineering
University of Leeds (Leeds, UK) – 13 February 2018

Modelling, control and robotics: using Engineering to understand Biomechanics (and vice versa)
University of Manchester (Manchester, UK) – 2 March 2017

New opportunities at the boundary between dynamics, control and bio-physics: a personal perspective
Institute for Complex Systems, National Research Council (Florence, Italy) – 12 July 2016

Walking the line: mixing biophysics, mechanics and control theory
Yale University (New Haven, CT, USA) – 28 May 2015

Topology effects on prestrained elastic networks
The 5th International Conference on Computational Methods, 28-30 July 2014, Cambridge (UK)

On the robustness of feedback linearization of Lur'e systems
37th National Conference on Theoretical and Applied Mechanics & The 1st International Conference on Mechanics (Hsinchu, Taiwan) – 8-9 November 2013

Walking the line: problems and opportunities at the nexus of biophysics and control theory
Imperial College (London, UK) – 7 March 2012

A neuromechanical theory of crawling
National Centre for Biological Sciences (Bangalore, India) – 6 September 2012

Robotic graspers and worm crawling: the role of soft materials in control
Indian Institute of Sciences (Bangalore, India) – 14 September 2012

A neuromechanical theory of crawling
University of Manchester (Manchester, UK) – 28 November 2012

Awards, professional memberships and activities

2018: contributor for the **UK-RAS White paper on "Agricultural Robotics: The Future of Robotic Agriculture"**
2018 – present: member of the **AMT/010 Committee on Robotics of the British Standard Institute**
Nov 2017: selected amongst 30 European researchers to attend the **US-EU Frontiers Of Engineering** symposium organized by the US National Academy of Engineering
Jul 2017: **Organizer** of "Enhanced Water Quality Management Workshop", University of Campinas (Brazil)
Feb 2017: **Organizer** of workshop "Engineering meets Medicine: Opportunities in Rehabilitation", University of Liverpool (UK)
Nov 2016: selected to attend the first **RAEng Frontiers of Engineering for Development**

symposium

2016 – present: Member of the **Associate College** for the UK Engineering and Physical Sciences Research Council

2015 – present: **Reviewer** for the Leverhulme Trust Foundation and European Research Council

2015: member of **Programme committee** of 16th Towards Autonomous Robotic Systems conference, Liverpool, 8-10 September 2015

2014: **Rising Star award** by Engineering and Physical Sciences Research Council UK.

2014 – present: **STEM ambassador**, Science Technology Engineering and Mathematics network (UK)

2013 – 2015: member of the **Thesis advisory committee** for PhD examinations National Centre for Biological Sciences, Bangalore (India)

2011 – present: **Member** of the Society for Industrial and Applied Mathematics

2010 – present: **Reviewer** for the several international journals, including: Sensors, Actuators, Automatica, Communications in Nonlinear Science and Numerical Simulations, IEEE Transactions on Automatic Control, International Journal of Adaptive Control and Signal Processing

2004: **Best student award**
Faculty of Engineering, University of Florence (Italy)

Peer-reviewed journal publications

1. "A novel control architecture for marginally stable dynamically substructured systems", A.Hu and P.Paoletti, *Mechanical Systems and Signal Processing*, 143, 106834, 2020, doi: 10.1016/j.ymssp.2020.106834
2. "Low-Cost Monitoring System for Hydroponic Urban Vertical Farm," F.Ruscio *et al.*, *International Journal of Agricultural and Biosystems Engineering*, 13(10), 267-271, 2019, doi: 10.5281/zenodo.3566357;
3. "A Low Cost Ultrasound-based Localisation System for Ground Robotics", A.Burns, S.Fichera and P.Paoletti, *Sensors & Transducers*, 238 (11), 21-30, 2019, https://www.sensorsportal.com/HTML/DIGEST/P_3130.htm;
4. "Automatic Fault Detection for Selective Laser Melting using Semi-Supervised Machine Learning", I.Okaro *et al.*, *Additive Manufacturing*, 27, 42-53, 2019, doi: 10.1016/j.addma.2019.01.006;
5. "Agricultural robotics: the future of robotic agriculture", T.Duckett *et al.*, *UK-RAS White Papers*, 2018, https://arxiv.org/abs/1806.06762;
6. "AFM Characterization of the Internal Mammary Artery as a Novel Target for Arterial Stiffening", Z.Chang *et al.*, *Scanning*, 2018, 634042, 2018, doi: 10.1155/2018/6340425;
7. "A Versatile Mass-Sensing Platform With Tunable Nonlinear Self-Excited Microcantilevers", J.Mouro, B.Tiribilli and P.Paoletti, *IEEE Transactions on Nanotechnology*, 17(4), 2018;
8. "Nanomechanics and ultrastructure of the internal mammary artery adventitia in patients with low and high pulse wave velocity," Z.Chang *et al.*, *Acta Biomaterialia*, 73, 437–448, (2018), doi: 10.1016/j.actbio.2018.04.036;
9. "Measuring viscosity with nonlinear self-excited microcantilevers," J.Mouro, B.Tiribilli and P.Paoletti, *Applied Physics Letters*, 111, 144101 (2017), doi: 10.1063/1.4995386;
10. "Nonlinear behaviour of self-excited microcantilevers in viscous fluids," J.Mouro, B.Tiribilli and P.Paoletti, *Journal of Micromechanics and Microengineering*, 27, 095008, 2017, doi: 10.1088/1361-6439/aa7a6f;
11. "Grasping with a soft glove: intrinsic impedance control in pneumatic actuators," P.Paoletti, G.W.Jones and L.Mahadevan, *Journal of The Royal Society Interface*, 14(128), 2017, doi: 10.1098/rsif.2016.0867;
12. "Integrative neuromechanics of crawling in D. melanogaster larvae," C.Pehlevan, P.Paoletti

and L. Mahadevan, *eLife*, 5, 2016, doi: 10.7554/eLife.11031;
13. "Feedback Linearization in Systems with Nonsmooth Nonlinearities," S.Jiffri, P.Paoletti and J.E.Mottershead, *Journal of Guidance, Control, and Dynamics*, 814-825, 2016 doi: 10.2514/1.G001220;
14. "A novel dissipativity-based control for inexact nonlinearity cancellation problems," G.Innocenti and P.Paoletti, *Mathematical problems in Engineeering*, 2015, 319761, 2015 doi: 10.1155/2015/319761;
15. "Embedding dynamical networks into distributed models," G.Innocenti and P.Paoletti, *Communications in Nonlinear Science and Numerical Simulation*, 24, 21-39, 2015 doi: 10.1016/j.cnsns.2014.12.009;
16. "Intermittent locomotion as an optimal control strategy," P.Paoletti and L.Mahadevan, *Proceedings of the Royal Society A*, 470, 20130535, 2014, doi: 10.1098/rspa.2013.0535;
17. "Feedback Linearisation for Nonlinear Vibration Problems," S.Jiffri, P.Paoletti, J.E.Cooper and J.E.Mottershead, *Shock and Vibration*, 106531, 2014 doi: 10.1155/2014/106531;
18. "A proprioceptive neuromechanical theory of crawling," P.Paoletti and L.Mahadevan, *Proceedings of the Royal Society B*, 281, 20141092, 2014, doi: 10.1098/rspb.2014.1092;
19. "Nanoscale characterization of the biomechanical properties of collagen fibrils in the sclera," M.Papi, P.Paoletti, B.Geraghty and R.Akhtar, *Applied Physics Letters*, 104, 103703, 2014, doi: 10.1063/1.4868388;
20. "On the robustness of feedback linearization of Lur'e systems," G.Innocenti and P.Paoletti, *Procedia Engineering*, 79, 407-410, 2014, doi: 10.1016/j.proeng.2014.06.361;
21. "Disclosing and overcoming the trade-off between noise and scanning speed in atomic force microscopy," B.Torre, M.Basso, B.Tiribilli, P.Paoletti and M.Vassalli, *Nanotechnology*, 24, 325104, 2013, doi:10.1088/0957-4484/24/32/325104;
22. "Balancing on tightropes and slacklines," P.Paoletti and L.Mahadevan, *Journal of the Royal Society Interface*, 9, 2097-2108, 2012, doi: 10.1098/rsif.2012.0077;
23. "Acceleration waves in complex materials," P.Paoletti, *Discrete and Continuous Dynamical Systems – Series B*, 17(2), 637-659, 2012, doi:10.3934/dcdsb.2012.17.637;
24. "Planar controlled gliding, tumbling and descent," P.Paoletti and L.Mahadevan, *Journal of Fluid Mechanics*, 689, 489-516, 2011, doi:10.1017/jfm.2011.426;
25. "Self-driven soft imaging in liquid by means of photothermal excitation," P.Paoletti, M.Basso, V.Pini, B.Tiribilli and M.Vassalli, *Journal of Applied Physics*, 110, 114315, 2011, doi:110.1063/1.3665396;
26. "Rate limited time optimal control of an inverted pendulum," P.Paoletti and R.Genesio, *Systems & Control Letters*, 60(4), 264-270, 2011, doi:10.1016/j.sysconle.2011.02.003;
27. "AFM Imaging via Nonlinear Control of Self-driven Cantilever Oscillations," M.Basso, P.Paoletti, B.Tiribilli and M.Vassalli, *IEEE Transactions on Nanotechnology*, 10(3), 560- 565, 2011, doi:10.1109/TNANO.2010.2051815;
28. "Complex bodies with memory effects: linearized setting," P.M.Mariano and P.Paoletti, *Mathematical Methods in the Applied Sciences*, 32, 1041–1067, 2009, doi:10.1002/mma.1075;
29. "Detection of microviscosity by using uncalibrated atomic force microscopy cantilever," M.Papi, G.Maulucci, G.Arcovito, P.Paoletti, M.Vassalli and M.De Spirito, *Applied Physics Letters*, 93(12), 124102, 2008, doi:10.1063/1.2970963;
30. "Modelling and analysis of autonomous micro-cantilever oscillations," M.Basso, P.Paoletti, B.Tiribilli and M.Vassalli, *Nanotechnology*, 19(47), 475501, 2008, doi:10.1088/0957-4484/19/47/475501.

Conference abstracts and proceedings

1. "Nonlinear Aeroservoelastic Control in the Presence of Uncertainty", N.D'Amico *et al.*, *2020 AIAA SciTech Forum*, 6-10 January 2020;
2. "Low-Cost Monitoring System for Hydroponic Urban Vertical Farm," F.Ruscio *et al.*, *ICARAC*

2019: International Conference on Agricultural Robotics, Automation and Control, 21-22 October 2019. – **Best paper award**

3. "A low cost ultrasound-based localisation system," A.Burns, S.Fichera and P.Paoletti, *1st IFSA Frequency & Time Conference*, 25-27 September 2019;
4. "A Robust Polyurethane Depositing System for Overcoming Obstacles in Disaster Scenario Robotics," A.Burns, S.Fichera and P.Paoletti, *CASE 2019 - International Conference on Automation Science and Engineering*, 22-26 August 2019;
5. "A Robust Polyurethane Depositing System for Overcoming Obstacles in Disaster Scenario Robotics," A.Burns, S.Fichera and P.Paoletti, *TAROS 2019 - 20th Towards Autonomous Robotic Systems Conference*, 3-5 July 2019;
6. "Nonlinearity detection in dynamical systems," C.Moseley *et al.*, *12th UKACC International Conference on Control*, 5-7 September 2018;
7. "Evolving Coverage Behaviours For MAVs Using NEAT", J.Butterworth, B.Broeker, K.Tuyls and P.Paoletti, *International Conference on Autonomous Agents and Multiagent Systems*, 10-15 July 2018;
8. "Robust Control of a Nonlinear Aeroservoelastic System," P.Paoletti, S.Fichera, D.Miranda and G.Innocenti, *2018 AIAA SciTech Forum*, 8-12 January 2018;
9. "Input relevance for Gaussian process models of air path systems," R.Jackson, C.Moseley, P.Paoletti, and P.Green, *IMechE Internal Combustion Engines 2017*, 6-7 December 2017;
10. "Localized nanomechanical characterization of arterial stiffening in human arteries with the PeakForce Quantitative Nanomechanical Mapping technique," Z.Chang, R.Akhtar, M.Hansen, L.Rasmussen, Po-Yu Chen and P. Paoletti, *2017 TMS Annual Meeting & Exhibition*, 26 February-02 March 2017;
11. "Diesel engine torque prediction using static neural networks," C.Moseley, P.Paoletti, T.Shenton, B.Neaves and G.S.Sukumar, *3rd Biennial International Conference on Powertrain Modelling and Control*, 7-9 September 2016;
12. "Tuning of a parametric diesel air-path model for use in the optimisation of test signals for system identification of diesel engines," C.Moseley, P.Paoletti, T.Shenton, B.Neaves and G.S.Sukumar, *3rd Biennial International Conference on Powertrain Modelling and Control*, 7-9 September 2016;
13. "Enhanced Nonlinear Model and Control Design for a Flexible Wing," F.Piovanelli, P.Paoletti and G.Innocenti, *2016 European Control Conference*, 19 June-1 July 2016;
14. "Quantitative measurement of the mechanical properties of vascular tissue with PeakForce QNM atomic force microscopy," Z.Chang, M.L.Hansen, L.M.Rasmussen, P.Y. Chen, P.Paoletti and R.Akhtar, *5th International Conference of Bionic Engineering*, 21-24 June 2016;
15. "Stabilization of a Nonlinear Wing Section: A Case Study for Control with Inexact Nonlinearity Cancellations," G.Innocenti and P.Paoletti, *2015 European Control Conference*, 15-17 July 2015, doi: 10.1109/ECC.2015.7330851
16. "Effects of nearest neighbors interactions on control of nonlinear vehicular platooning," P.Paoletti and G.Innocenti, *2015 European Control Conference*, 15-17 July 2015, doi: 10.1109/ECC.2015.7330992
17. "Disclosing and overcoming inexact nonlinearity cancellation issues," P.Paoletti and G.Innocenti, *Proceedings of the 2014 European Control Conference*, 24-27 June 2014 doi: 10.1109/ECC.2014.6862255;
18. "Topology effects on prestrained elastic networks," P.Paoletti and L.Mahadevan, *The 5th International Conference on Computational Methods*, 28-30 July 2014, Cambridge (UK) – **invited talk**;
19. "Analysis of Oscillating Microcantilever Dynamics: a Floquet Perspective," P.Paoletti and M.Basso, *Proceedings of 52nd IEEE Conference on Decision and Control*, Florence (Italy), 10-13 December 2013, doi: 10.1109/CDC.2013.6759908;
20. "A Virtual Space Embedding for the Analysis of Dynamical Networks," G.Innocenti and

P.Paoletti, *Proceedings of 52nd IEEE Conference on Decision and Control*, Florence (Italy), 10-13 December 2013, doi: 10.1109/CDC.2013.6760067;

21. "On the robustness of feedback linearization of Lur'e systems", P.Paoletti and G.Innocenti, 1st International Conference on Mechanics, Hsinchu (Taiwan), November 2013 – **invited talk**;
22. "Nonlinear Control of a Flexible Aeroelastic System," S.Jiffri, P.Paoletti, J.E.Mottershead and J.E. Cooper, *International Forum on Aeroelasticity & Structural Dynamics 2013*, Bristol (UK), 24-26 June 2013;
23. "Controlled gliding, tumbling and descent," P.Paoletti and L.Mahadevan, *Automatica.it 2011 (Annual meeting of the Italian Society for Research in Control)*, Pisa (Italy), September 7-9, 2011;
24. "Traveling waves propagation on networks of dynamical systems," G.Innocenti and P.Paoletti, *18th World Congress of the International Federation of Automatic Control (IFAC)*, Milano (Italy), August 28-September 2, 2011, doi: 10.3182/20110828-6-IT-1002.02238;
25. "Traveling waves in one-dimensional networks of dynamical systems," P.Paoletti and G.Innocenti, *2011 American Control Conference*, San Francisco, California (USA), June 29-July 1, 2011;
26. "Crawling Without a CPG: a Neuromechanical Model," P.Paoletti and L.Mahadevan, *SIAM Conference on Applications of Dynamical Systems (DS11)*, Snowbird, UT (USA), May 22- 26, 2011;
27. "Crawling without a CPG," P.Paoletti and L.Mahadevan, *Center for Brain Science Annual Retreat*, Harvard University, Cambridge, MA (USA), May 13, 2011;
28. "Self oscillating mode in air and liquid: a multimodal analysis," M.Vassalli, B.Torre, P.Paoletti, B.Tiribilli and M.Basso, *3rd Multifrequency AFM Conference*, Madrid (Spain), March 14-15, 2011;
29. "Digital Control of a Dual Stage Piezo Actuator for AFM," B.Tiribilli, M.Basso, F.D'Anca, D.De Leo, P.Paoletti and M.Vassalli, *3rd Multifrequency AFM Conference*, Madrid (Spain), March 14-15, 2011;
30. "Acceleration waves in complex bodies," P.Paoletti, *10th Biannual Meeting of SIMAI (Italian Society for Industrial and Applied Mathematics)*, Cagliari (Italy), June 2010 – **invited talk**;
31. "A sound card application for cantilever calibration," B.Tiribilli, P.Paoletti, M.Papi, V.Pini, F.Sbrana and M.Vassalli, *AFM BioMed Conference*, Red Island (Croatia), May 2010;
32. "Characterization of self-oscillating Soft Imaging by means of photothermal excitation," M.Vassalli, P.Paoletti , M.Basso, V.Pini, and B.Tiribilli, *AFM BioMed Conference*, Red Island (Croatia), May 2010;
33. "A sound card application for cantilever calibration," B.Tiribilli, P.Paoletti, M.Papi, V.Pini, F.Sbrana and M.Vassalli, *12th International Scanning Probe Microscopy Conference*, Sapporo (Japan), May 2010;
34. "Characterization of self-oscillating Soft Imaging by means of photothermal excitation," M.Vassalli, P.Paoletti, M.Basso, V.Pini, and B.Tiribilli, *12th International Scanning Probe Microscopy Conference*, Sapporo (Japan), May 2010;
35. "Modeling and Analysis of Auto-Tapping AFM," M.Basso, P.Paoletti, B.Tiribilli and M.Vassalli, *Proceedings of 47th IEEE Conference on Decision and Control*, Cancun (Mexico), pag 5188-5193, December 2008, doi:10.1109/CDC.2008.4739214;
36. "Conseguenze di un principio variazionale di Ericksen nella meccanica dei corpi elastici con polarizzazione," P.Paoletti, *Annual meeting of Mechanics of Materials group of the Italian Association for Theoretical and Applied Mechanics*, Genova (Italy), March 2008.

13st April 2020