

## Dr. Marco DOMANESCHI

(updated December 2015)

### Personal Data

Born in Pavia (Italy), on October 13, 1972

### Affiliation

Department of Civil and Environmental Engineering  
Technical University of Milan - P.za L. da Vinci, 32 - 20133 MILAN,  
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### Research Areas

*Experimental Analysis.* Static and dynamic experimental techniques for characterization and analysis of components and structures.

*Numerical Techniques.* Simulation and analysis of special structures, control systems, structural health monitoring systems. Time domain and frequency domain signal processing, probabilistic safety assessment (risk analysis).

*Finite Element Analysis of Structures.* Seismic analysis of large concrete dams. Long-span cable-supported bridges under wind, earthquake and traffic loading. Seismic analysis of nuclear power plants. Implementation of control and monitoring systems in complex structural model.

*Finite Element Analysis of Mechanical Components.* Composite pipes and mechanical joints. Coupled-thermo-mechanical and contact analysis. Constitutive modelling of composite materials and elastomers. Impact loading. Creasing and folding of composite paperboards.

*Safety Evaluation and Assessment.* Fragility computation via Monte Carlo simulation and FORM probability evaluation. Response Surface Methodology. Structural Optimisation. Robustness and resilience. Fatigue.

### Education and Degrees

2006      PhD in Civil Engineering from University of Pavia, Italy (highest final grade)

- 1999 Post-graduate specialization at the Technical University UPC of Barcelona, Spain
- 1998 MSc in Civil Engineering from University of Pavia, Italy
- 1990 High-school (“Liceo Scientifico”)

### **Professional Qualification**

- 1999-present Consultant for dams, bridges and tunnelling; structural and geotechnical analysis. Official approvals of buildings. R&D consultant in industrial manufacture and mechanical engineering.
- 2012 *Research Assist Program Award* of MSC Software USA (three years). This award is given for meritorious research developed by MSC finite element codes to 12 researchers each year around the world, involved in non-profit projects within academic institutions of recognized value (23 October 2012-2014).
- 1998 Professional Engineer (PE) Qualification

### **Academic Appointments**

- 2013-2016 Contract Professor of Solid and Structural Mechanics, School of Architecture, Technical University of Milan, MILAN, I (70-140 students classes)
- 2003-2016 Lecturer of Solid and Structural Mechanics, University of Pavia - PAVIA I, Technical University of Milan - MILAN I

### **Teaching areas**

Structural Engineering – Structural Dynamics – Solid Mechanics - Structural control and monitoring

### **Advisor of MSc Thesis**

- 2007-present Long-span bridges: analysis, control systems implementation against wind and earthquakes. Seismic risk analysis of nuclear power plants. Seismic analysis of nuclear buildings and large concrete dams. Simulation of shaking table tests on scaled structures.

Dynamic analysis of power generators and supports.

### **Speaker at Recent International Congresses**

- “3D Numerical Characterization and Efficiency Assessment of RNC Isolator Experimental Prototypes”, *EACS 2012 – 5th European Conference on Structural Control*, Genoa (I), 2012.
- “Some remarks on the mitigation of long-span bridges structural vibrations induced by wind and earthquake”, *EACS 2012 – 5th European Conference on Structural Control*, Genoa (I), 2012.
- “SEISMIC PERFORMANCE OF A WIND DESIGNED CONTROL STRATEGY ON A SUSPENSION BRIDGE”, *The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012)*, Stresa (I), 2012.
- “SEISMIC PROTECTION OF THE UPDATED CABLE-STAYED BRIDGE BENCHMARK WITH RNC PASSIVE DEVICES”, *The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012)*, Stresa (I), 2012.
- “Vibration-based Damage Localization in a Cable-stayed Bridge”, *World Conference on Structural Control and Monitoring (6WCSCM)*, Barcelona (E), 2014.
- “Modeling the Seismic Protection of the Updated Cable-Stayed Bridge Benchmark with Roll-N-Cage Devices”, *World Conference on Structural Control and Monitoring (6WCSCM)*, Barcelona (E), 2014.
- “Assessing the performance of a high damping rubber bearing in beyond-design conditions”, *International Workshop on Structural Health Monitoring 2015*, September 1-3, 2015, Stanford, CA-USA.
- “Challenges in damage identification based on finite element analyses and monitoring of neutral axis and curvature of concrete-steel composite structures”, *International Workshop on Structural Health Monitoring 2015*, September 1-3, 2015, Stanford, CA-USA.

### **Research and development activity aims to industrial patent and production**

2006- present    Press-fitting connections for multilayer pipes  
                  Push-fit connections for multilayer pipes  
                  Electro-fusion connections for polypropylene pipes  
                  Electro-inductive semi-active devices for structural control of building

Generation 3+ NPP: traditional and base isolated configuration  
Creasing and folding of laminated paperboards

### **Membership in Professional and Research Societies**

EACS European Association for the Control of Structures  
IABMAS International Association for Bridge Maintenance and Safety

### **Honors and Awards**

2009 Appreciation gratitude of the Regional Council for participation in emergency operations and inspections of buildings after the 2009 L'Aquila earthquake.

### **Membership to International Journal Editorial Board**

- *Structural Monitoring & Maintenance (SMM)*, Techno-Press Kaist (from January 2014). Invited by the Managing Editor.
- *Bridge Engineering*, ICE, (from November 2015). Invited by the Chief of the Editorial Panel and the Managing Editor.

### **Membership to Congress Editorial Boards**

- *Twelfth International Conference on Civil, Structural and Environmental Engineering Computing*, 2009, Madera (P). Invited by the Conference Chair.
- *Thirteen International Conference on Civil, Structural and Environmental Engineering Computing*, 2011, Crete (GR). Invited by the Conference Chair.
- *Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing*, 2013, Cagliari (I). Invited by the Conference Chair.
- *Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing*, 2015, Prague, Czech Republic. Invited by the Conference Chair.

## Membership to Congress Organization and Operation

- *5<sup>th</sup> European Conference on Structural Control*, 2012, Genoa (I). Invited by the Conference Chair.
- *6<sup>th</sup> International Conference on Bridge Maintenance, Safety and Management*, 2012, Stresa (I). Invited by the Conference Chair.
- *6<sup>th</sup> World Conference on Structural Control and Monitoring*, 2014, Barcelona (E). Invited by the Conference Chair.

## Chaired Congress Sessions

- Parallel Session: “Control of Structures” in the *Twelfth International Conference on Civil, Structural and Environmental Engineering Computing*, 2009, Madera, P. Invited by the Conference Chair.
- Special Session: “Nuclear Power Plant and Related Analysis” in the *Thirteen International Conference on Civil, Structural and Environmental Engineering Computing*, 2011, Crete, GR. Invited by the Conference Chair.
- Special Session 10: “Bridge control schemes and devices”, in the *5th European Conference on Structural Control*, 2012, Genoa, I. Invited by the Conference Chair.
- Parallel Session: “Control” in the *5th European Conference on Structural Control*, 2012, Genoa, I. Invited by the Conference Chair.
- Special Session 26: “Structural Control of Bridges and Footbridges: Extreme and Every-days Events” in the *6th International Conference on Bridge Maintenance, Safety and Management, 2012, Stresa, I*. Invited by the Conference Chair.
- *Special Session: “Bridges and Footbridges: Control Schemes and Devices”*, in the *World Conference on Structural Control and Monitoring (6WCSCM)*, 2014, Barcelona, Spain. Invited by the Conference Chair.
- *Parallel Session: “Civil Structures I”*, in the *International Workshop on Structural Health Monitoring 2015*, Stanford, CA-USA, September 1-3, 2015.” Invited by the Conference Chair.

## Seminars

- “Seminar on Structural Control with Applications to Special Structures”, September 2013 at the Department of Civil and Environmental Engineering, Princeton University, USA. Invited by the Faculty.
- “Seminar on Structural Control of Long-span Bridges under Seismic and Wind Excitations”, March, 2011 at the *Departament de Matemàtica Aplicada III*, Technical University of Barcelona, E. Invited by the Faculty.
- “Seminar on Structural Control Elements” for the MSc course of Structural Dynamics at the Technical University of Milan. AYs from 2007/08 to 2012/13. Invited by the Faculty.
- “Seminar on testing techniques for materials, dynamics, monitoring and control” (in mechanical laboratory with shaking table, universal test machine, monitoring devices and other facilities) for the MSc course of Structural Mechanics at the University of Pavia. AYs from 2002/03 to 2005/06. Invited by the Faculty.
- “Seminar on FE application and solution” (in numerical laboratory) for the MSc course of Soil-Structure Interaction at the University of Pavia. AYs from 2002/03 to 2005/06. Invited by the Faculty.

#### **Organizer of the following Conference Special Sessions**

- “Nuclear Power Plant and Related Analysis” in the *Thirteen International Conference on Civil, Structural and Environmental Engineering Computing*, 2011, Crete, GR.
- “Structural Control of Bridges and Footbridges: Extreme and Every-days Events” in *the 6th International Conference on Bridge Maintenance, Safety and Management*, 2012, Stresa, I.
- “Bridge control schemes and devices” in the *5th European Conference on Structural Control*, 2012, Genoa, I.
- “Bridges and footbridges: control schemes and devices” in the *6th edition of the World Conference of the International Association for Structural Control and Monitoring*, 2014, Barcelona, E.
- “SS18: Dynamic Assessment, Control & Monitoring of Structures by Experimental & Numerical Methods” in the *SEMC 2016: THE SIXTH INTERNATIONAL CONFERENCE ON STRUCTURAL ENGINEERING, MECHANICS AND COMPUTATION*, 5 - 7 September 2016, Cape Town, South Africa.

## Reviewer for International Journals

- Journal of Bridge Engineering ASCE (invited by the Editors - Prof. Zhengqing Chen, Prof. B. Andrawes, Prof. Suren Chen).
- Journal of Vibration and Acoustics ASME (invited by the Editor - Prof. E. Dragoni).
- Structural Monitoring and Maintenance, Techno-Press, (invited by the Editor - Prof. T.H. Yi).
- Computers & Structures, Elsevier (invited by the Editor - Prof. B. Topping).
- Wind and Structures, An International Journal (invited by the Editor - Prof. Chang-Koon Choi).
- Proceedings of the Institution of Civil Engineers ICE - Bridge Engineering (invited by the Editor - A. Alvite).
- Structure and Infrastructure Engineering, Taylor and Francis Group (invited by the Editor - Prof. J.R. Casas).
- International Journal of Structural Stability and Dynamics, World Scientific (invited by the Editor - Prof. J. N. Reddy).
- Structural Control and Health Monitoring, Wiley & Sons (invited by the Editor - Prof. L. Faravelli).
- Smart Structures and Systems, Techno Press (invited by the Editor - Prof. F. Casciati).
- The Open Construction & Building Technology Journal, Bentham Open (invited by the Editor - Prof. O. Ribakov).
- Advances in Structural Engineering (invited by the Editor - Dr. S.Y. Zhu).
- Nuclear Engineering and Design, Elsevier (invited by the Editor - Prof. D. Bestion).
- Journal of Earthquake Engineering (invited by the Editor – Prof. A. S. Elnashai, Prof. Kazuhiko Kawashima, Prof. G.M. Calvi).
- Ain Shams Engineering Journal (invited by the Editor – Prof. Amin Kamel El-kharbotly).
- Journal of Vibration and Control (invited by the Editor – Prof. Josè Rodellar).
- Earthquake Engineering and Engineering Vibrations, Springer (invited by the Editor – Dr. Xiang-Jian Wang).
- World Journal of Engineering and Physical Sciences, World Science Research Journals (invited by the Editor).
- Shock and Vibration, Hindawi Publishing Corporation (su invito dell'Editore)
- Periodica Polytechnica Civil Engineering (invited by the Editor – Dr. M. Bruggi).
- Journal of Zhejiang University-SCIENCE A, Elsevier, (invited by the Editor - Dr. Helen Zhang).
- Journal of Structural Engineering ASCE (invited by the Editor - Prof. Biswajit Basu).
- Computer-Aided Civil and Infrastructure Engineering (invited by the Editor - Prof. Hojjat Adeli).
- Meccanica (invited by the Editor - Prof. Claudia Comi).

- Mathematical Problems in Engineering, Hindawi, invited by the Editorial Board Member Dr. Zhen-Lai Han

### **Visited Universities for Research Cooperation and Seminars**

Technical University of Barcelona, Dept. of Strength of Materials and Structural Engineering, 1999.  
 Technical University of Barcelona, Department of Applied Mathematics III, 2011.  
 Princeton University, Department of Civil and Environmental Engineering, 2013  
 Princeton University, Department of Civil and Environmental Engineering, 2015.

### **Research Cooperation with Academies**

- Technical University of Milan (seismic risk of NPP, structural control and monitoring of long-span bridges, seismic analysis of large concrete dams).
- Technical University of Barcelona UPC (RNC innovative isolation system and application on bridges).
- Honshu-Shikoku Bridge Expressway Company Limited – HSBE, Japan (simulation of control solution and damage detection techniques on the Shimotsui-Seto suspension bridge).
- Technical University of Turin (structural control and damage detection methods on bridges).
- University of Pavia (structural control and monitoring, fragility analysis of bridges).
- Russian Academy of Sciences, Moscow, Russia (structural control during the PhD course).
- University of New York at Buffalo (control of bridges and fragility analysis during the PhD course).
- Princeton University (development of monitoring techniques and damage detection methods on viaduct and bridges).

### **Publications (on a total of more than 100)**

#### **RECENT ARTICLES IN INTERNATIONAL JOURNALS**

- **M. Domaneschi, L. Martinelli** (2012), “Performance Comparison of Passive Control Schemes for the Numerically Improved ASCE Cable-Stayed Bridge Model”, in *Earthquakes and Structures*, 3(2):181-201. Techno Press. ISSN: 2092-7614 (Print), ISSN: 2092-7622 (Online).



- **M. Domaneschi** (2012), "Simulation of Controlled Hysteresis by the Semi-active Bouc-Wen Model", *Computers and Structures*, 106–107:245–257. Doi:10.1016/j.compstruc.2012.05.008
- **M. Domaneschi** (2012), "Experimental and numerical study of standard impact tests on polypropylene pipes with brittle behaviour", *Journal of Engineering Manufacture*, Proc. IMechE Part B, 226(12):2035–2046. DOI: 10.1177/0954405412461983.
- **C. Shi, M. Domaneschi, L. Martinelli** (2012), "Nonlinear Behaviors of Submerged Floating Tunnels under Seismic Excitation", *Applied Mechanics and Materials*, 226-228:1124-1127. DOI:10.4028/www.scientific.net/AMM.226-228.1124
- **M. Domaneschi, L. Martinelli** (2013), "Optimal Passive and Semi-active Control of a Wind Excited Suspension Bridge", *Structure and Infrastructure Engineering*, 9(3):242-259. DOI:10.1080/15732479.2010.542467.
- **M. Domaneschi, M. Ismail, J. Rodellar, G. Carusone, L. Martinelli** (2013), "Characterization, modeling and assessment of Roll-N-Cage isolator using the cable-stayed bridge benchmark", *Acta Mechanica*, 224, 525–547. DOI: 10.1007/s00707-012-0771-4
- **M. Domaneschi, L. Martinelli, C. Shi** (2013), "Aeolic and Seismic Structural Vibrations Mitigation on Long-Span Cable-Supported Bridges", *Advanced Materials Research*, 690-693: 1168-1171. DOI: 10.4028/www.scientific.net/AMR.690-693.1168
- **F. Perotti, M. Domaneschi, S. De Grandis** (2013), "The numerical computation of seismic fragility of base-isolated NPP buildings", *Nuclear Engineering and Design*, *Nuclear Engineering and Design*, 262:189–200. DOI: 10.1016/j.nucengdes.2013.04.029
- **M. Domaneschi, L. Martinelli** (2013), "Deepening the ASCE bridge benchmark: transversal response under seismic loading", Accepted for publication (July 5, 2013) in *Journal of Bridge Engineering ASCE*. DOI: 10.1061/(ASCE) 13 BE.1943-5592.0000532.
- **M. Domaneschi, L. Martinelli** (2013), "Refined Optimal Passive Control of Buffeting-induced Wind Loading of a Suspension Bridge", Accepted for publication (July 9, 2013) in *Wind & Structures*, Techno-Press, Kaist.
- **M. Domaneschi, M.P. Limongelli, L. Martinelli** (2013), "Vibration Based Damage Localization Using MEMS on a Suspension Bridge Model", *Smart Structures and Systems Smart Structures and Systems*, 12(6), 679-694. DOI:http://dx.doi.org/10.12989/sss.2013.12.6.679.
- **M. Domaneschi, M.P. Limongelli, L. Martinelli** (2013), "Multi-Site Damage Localization in a Suspension Bridge via Aftershock Monitoring", *Ingegneria Sismica*, 30(3), 56-72.
- **B. Basu, O. Bursi, F. Casciati, S. Casciati, A. Del Grosso, M. Domaneschi, L. Faravelli, J. Holnicki, H. Irschik, M. Krommer, M. Lepidi, A. Martelli, B. Oztork, F. Pozo, G. Pujol, Z. Rakicevic, J. Rodellar** (2014), "An EACS joint perspective. Recent studies in civil structural

control across Europe”, *Structural Control & Health Monitoring*, 21(12), 1414–1436. DOI: 10.1002/stc.1652

- **M. Domaneschi, M.P. Limongelli, L. Martinelli** (2015), “Damage detection and localization on a benchmark cable-stayed bridge”, *Earthquakes and Structures*, 8(5), 1113-1126. DOI: <http://dx.doi.org/10.12989/eas.2015.8.5.1113>.
- **M. Domaneschi, L. Martinelli, F. Perotti** (2015), “Wind and earthquake protection of cable-supported bridges”, *Proceedings of the Institution of Civil Engineers - Bridge Engineering*. In Press. DOI: 10.1680/bren.14.00026.
- **M. Domaneschi, L. Martinelli, E. Po** (2015), “Control of Wind Buffeting Vibrations in a Suspension Bridge by TMD: hybridization and robustness issues”, *Computers and Structures*, 155, 3-17. DOI: 10.1016/j.compstruc.2015.02.031.
- **M. Domaneschi, M.P. Limongelli, L. Martinelli** (2015), “Wind-Driven Damage Localization on a Suspension Bridge”, *The Baltic Journal of Road and Bridge Engineering*. Accepted for publication (March 9, 2015), ISSN 1822-427X print, ISSN 1822-4288 online.
- **G. De Mari, M. Domaneschi, M. Ismail, L. Martinelli, J. Rodellar** (2015), “Reduced-order coupled bidirectional modeling of the Roll-N-Cage isolator with application to the updated bridge benchmark”, *Acta Mechanica*, 226(10), 3533-3553. DOI: 10.1007/s00707-015-1394-3
- **M. Domaneschi, L. Martinelli**, “Earthquake resilience-based control solutions for the extended benchmark cable-stayed bridge”, *Journal of Structural Engineering*, ASCE. Online Publication Date: 5 Aug 2015, DOI: 10.1061/(ASCE)ST.1943-541X.0001392.

#### RECENT ARTICLES IN CONFERENCE PROCEEDINGS

- M. DOMANESCHI, M.P. LIMONGELLI, L. MARTINELLI, “Interpolation damage detection method on a suspension bridge model: influence of sensors disturbances and reference signature”, *EACS 2012 – 5th European Conference on Structural Control*, Genoa, Italy – 18-20 June 2012. ISBN 978-88-95023-13-7.
- M. DOMANESCHI, G. MAZZARELLA, M.G. MULAS, “Nonlinear structural dynamic simulation and analysis of the SMART-2008 shaking table specimen”, *EACS 2012 – 5th European Conference on Structural Control*, Genoa, Italy – 18-20 June 2012. ISBN 978-88-95023-13-7.
- G. CARUSONE, M. ISMAIL, M. DOMANESCHI, J. RODELLAR, L. MARTINELLI, “3D Numerical Characterization and Efficiency Assessment of RNC Isolator Experimental Prototypes”, *EACS 2012 – 5th European Conference on Structural Control*, Genoa, Italy – 18-20 June 2012. ISBN 978-88-95023-13-7.
- M. DOMANESCHI, L. MARTINELLI, “Some remarks on the mitigation of long-span bridges

structural vibrations induced by wind and earthquake”, EACS 2012 – 5th European Conference on Structural Control, Genoa, Italy – 18-20 June 2012. ISBN 978-88-95023-13-7.

- C. SHI, M. DOMANESCHI, F. PEROTTI, “Submerged floating tunnels under seismic motion: vibration mitigation issues”, EACS 2012 – 5th European Conference on Structural Control, Genoa, Italy – 18-20 June 2012. ISBN 978-88-95023-13-7.
- M. DOMANESCHI, L. MARTINELLI (2012), “STRUCTURAL CONTROL OF A WIND EXCITED SUSPENSION BRIDGE MODEL ACCOUNTING MOTION INDUCED WIND FORCES”, The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa (VB), Italy. ISBN 978-0-415-62124-3 and 978-0-203-10338-8.
- M. DOMANESCHI, L. MARTINELLI (2012), “SEISMIC PERFORMANCE OF A WIND DESIGNED CONTROL STRATEGY ON A SUSPENSION BRIDGE”, The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa (VB), Italy. ISBN 978-0-415-62124-3 and 978-0-203-10338-8.
- G. CARUSONE, M. DOMANESCHI, L. MARTINELLI, M. ISMAIL, J. RODELLAR (2012), “SEISMIC PROTECTION OF THE UPDATED CABLE-STAYED BRIDGE BENCHMARK WITH RNC PASSIVE DEVICES” , The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa (VB), Italy. ISBN 978-0-415-62124-3 and 978-0-203-10338-8.
- M. DOMANESCHI, M.P. LIMONGELLI, L. MARTINELLI (2012), “DAMAGE DETECTION IN A SUSPENDED BRIDGE MODEL USING THE INTERPOLATION DAMAGE DETECTION METHOD” , The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa (VB), Italy. ISBN 978-0-415-62124-3 and 978-0-203-10338-8.
- M. Domaneschi, M.P. Limongelli, L. Martinelli, “Damage localization in a large span bridge subjected to seismic excitation”, Proc. of 15th World Conference on Earthquake Engineering, Lisbon, Portugal 2012.
- M. Domaneschi, L. Martinelli, F. Perotti, “Seismic Rotational Components on Isolated Structures”, Proc. of 15th World Conference on Earthquake Engineering, Lisbon, Portugal 2012.
- C. Shi, M. Domaneschi, L. Martinelli, “Nonlinear Behaviors of Submerged Floating Tunnels under Seismic Excitation”, The 2nd International Conference on Vibration, Structural Engineering, and Measurement (ICVSEM2012), Shanghai, China 2012.
- M. Domaneschi, L. Martinelli, F. Perotti, “feasible control strategies in the protection of long span bridges against external dynamic loads”, Strait Crossing 2013, 16 - 19 June 2013, Bergen, Norway.
- Federico Perotti, Chunxia Shi, Marco Domaneschi, Luca Martinelli, “The non-linear dynamic

response of Submerged Floating Tunnels to earthquake and seaquake excitation”, Strait Crossing 2013, 16 - 19 June 2013, Bergen, Norway.

- Domaneschi M., Limongelli M.P., Martinelli L. (2013), “Interpolation Damage Detection Method on a Suspension Bridge Model: Influence of Sensors Disturbances”, DAMAS 2013 - 10th International conference on damage assessment of structures, July 8-10 2013, Dublin, Ireland
- M. Domaneschi, L. Martinelli, E. Po , “Control of Wind Induced Buffeting Vibrations in a Long Span Suspension Bridge by TMDs”, The Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing (CC2013), Cagliari, Sardinia, Italy 3-6 September 2013.
- M. Domaneschi, M. P. Limongelli, L. Martinelli, “Damage Localization on a Suspension Bridge basing on wind induced vibrations”, The Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing (CC2013), Cagliari, Sardinia, Italy 3-6 September 2013.
- C. Shi, M. Domaneschi, L. Martinelli, “Nonlinear Behavior of Submerged Floating Tunnels Accounting for Seaquake Effects”, Fifth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2013). September 2–4, 2013. Cape Town, South Africa.
- M. Domaneschi, L. Martinelli, “Robustness of passive and semi-active control schemes on a cable stayed bridge under extreme loading conditions”, 7th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2014), Shanghai, China, July 7-11, 2014.
- M. Domaneschi, L. Martinelli, E. Po, “Robustness issues and hybridization of a Tuned Mass Damper system on a suspension bridge model under variable wind buffeting”, 7th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2014), Shanghai, China, July 7-11, 2014.
- F. Perotti, L. Martinelli, M. Domaneschi, “Translational and rotational excitation for the seismic analysis of base-isolated structures”, Eurodyn 2014, June 30-July 2, 2014, Porto, Portugal.
- M. Domaneschi, M.P. Limongelli, L. Martinelli, “Vibration-based Damage Localization in a Cable-stayed Bridge”, World Conference on Structural Control and Monitoring (6WCSCM), July 15-17, 2014, Barcelona, Spain. ISBN: 978-84-942844-5-8
- G. De Mari, M. Domaneschi, M. Ismail, L. Martinelli, J. Rodellar, “Modeling the Seismic Protection of the Updated Cable-Stayed Bridge Benchmark with Roll-N-Cage Devices” , World Conference on Structural Control and Monitoring (6WCSCM), July 15-17, 2014, Barcelona, Spain. ISBN: 978-84-942844-5-8
- M. Domaneschi, L. Martinelli, “Tuned Mass Damper on a suspension bridge under wind buffeting: modeling, hybridization and robustness”, World Conference on Structural Control and

Monitoring (6WCSCM), July 15-17, 2014, Barcelona, Spain. ISBN: 978-84-942844-5-8

- M. Domaneschi, M.P. Limongelli, L. Martinelli, “Damage identification in a benchmark cable-stayed bridge using the Interpolation Method”, 7th European Workshop on Structural Health Monitoring. July 8-11, 2014, La Cité, Nantes, France.
- M. Domaneschi, L. Martinelli, F. Perotti, M. Tomasin, “Assessing the performance of a high damping rubber bearing in beyond-design conditions”, International Workshop on Structural Health Monitoring 2015, September 1-3, 2015, Stanford, CA-USA.
- M. Colombo, M. Domaneschi, A. F. Ghisi, “Validation of Finite Element Models of Existing Concrete Dams Through Monitoring Data”, International Workshop on Structural Health Monitoring 2015, September 1-3, 2015, Stanford, CA-USA.
- M. Domaneschi, D. Sigurdardottir, B. Glisic, “Challenges in damage identification based on finite element analyses and monitoring of neutral axis and curvature of concrete-steel composite structures” , International Workshop on Structural Health Monitoring 2015, September 1-3, 2015, Stanford, CA-USA.
- M. Domaneschi, C. Guerini, L. Martinelli, F. Perotti, M. Tomasin, “Effects of foundation rotational motion on the non-linear response of a base-isolated NPP under earthquake loading”, The Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing, Prague, Czech Republic, 1-4 September 2015.
- M. Domaneschi, L. Martinelli, F. Perotti, M. Tomasin, “Effects of foundations rotational excitation on structural control of a bridge under seismic loading”, The Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing, Prague, Czech Republic, 1-4 September 2015.