PAOLO M. CALVI

Curriculum Vitæ

Department of civil and Environmental Engineering University of Washington 214E More Hall 352700 Seattle, WA 98195 Phone: (206) 616-0511 Email: pmc85@uw.edu

EDUCATIONAL HISTORY

University of Toronto, Toronto, ON, Canada Ph.D., Civil Engineering June, 2015 Dissertation Title: A Theory for the Shear Behaviour of Cracks Providing a Basis for the Assessment of Cracked Reinforced Concrete Structures Primary advisor: Professor Michael P. Collins

University of Pavia, Pavia, Italy M.Sc., Civil Engineering July, 2010 Thesis Title: Towards Improved Acceleration Floor Spectra for Seismic Design Primary advisor: Professor Timothy J. Sullivan

University California San Diego (UCSD), San Diego, CA, USA Visiting Student, Department of Structural Engineering March 2008 – June 2008

University of Pavia, Pavia, Italy B.Eng., Civil Engineering December 2008 Undergraduate Dissertation Title: Toward a Novel Approach for Damage Identification and Health Monitoring of Bridge Structures Primary advisor: Professor Paolo Venini

EMPLOYMENT HISTORY

University of Washington Seattle, WA, USA Associate Professor, Department of Civil and Environmental Engineering, Sept. 2021 – Present

Polytechnic of Milan Milano, Italy Part-Time Associate Professor, Department of Civil and Environmental Engineering, Dec. 2023 – Present

University of Washington Seattle, WA, USA Assistant Professor, Department of Civil and Environmental Engineering, Sept. 2015 – Sept. 2021 University at Buffalo (SUNY) Buffalo, NY, USA Visiting Researcher, Department of Civil, Structural and Environmental Engineering, Sept. 2014 – June 2015

European Centre for Training and Research in Earthquake Engineering (EUCENTRE) Pavia, Italy Researcher, March 2015 – September 2015

University of Toronto Toronto, ON, Canada Graduate Research Assistant, Department of Civil and Environmental Engineering, Sept. 2010 – June 2015

University of Toronto Toronto, ON, Canada Teaching Assistant, Department of Civil and Environmental Engineering, Sept. 2010 – December 2014

AWARDS AND HONORS

Charles Z. Zollman Award, 2021. Precast/Prestressed Concrete Institute. (For PCI Journal paper with most "contribution in advancing the state-of-the-art of precast and prestressed concrete.")

IABSE 2020 Outstanding Paper Award (Scientific Paper).

Doctoral Completion Award, 2015, University of Toronto (\$3,000 CAD)

Nominee for the 2015 fib Achievement Award for Young Engineers (AAYE).

School of Graduate Studies Conference Grant, 2014, University of Toronto (\$1,000 CAD)

Graduate Fellowship, 2010 – 2014, University of Toronto (\$20,000 CAD)

Teaching Assistantship, 2010 – 2014, University of Toronto (\$20,000 CAD)

Research Assistantship, 2010 – 2015, University of Toronto (\$20,000 CAD)

AFFILIATIONS AND OTHER APPOINTMENTS

University of Pavia Pavia, Italy Affiliate Associate Professor, Department of Civil and Environmental Engineering, October 2022 – Present

Scuola Superiore Meridionale Naples, Italy Affiliate Associate Professor, Modeling and Engineering Risk and Complexity Department, May 2020 – Present

PUBLICATIONS

¹ Graduate students advised or co-advised by Calvi
² Post-doc advised or co-advised by Calvi
IF: journal impact factor reported by journal as of Sep 3, 2024
GS: Google Scholar citations as of Sep 3, 2024: 1729
GS h-index as of Sep 3, 2024: 19
GS i10-index as of Sep 3, 2024: 32

Refereed archival journal publications (Citations and IF not updated)

- <u>P.M. Calvi</u>, E. Che, T. Sweet¹, L. Lowes, J. Berman (2024). "Data Collection Using Terrestrial Laser Scanners from the Shake Table Test of a Full-Scale Reinforced Concrete Building", ASCE Journal of Structural Engineering, Vol. 150, Issue 2. (IF: 2.528).
- W. Galik¹, <u>P.M. Calvi</u> (2024). "Corrosion and Fatigue Coupling: Assessment of a Prestressed Concrete Cable Stay", ASCE Journal of Performance of Constructed Facilities, Vol. 38, Issue 1. (IF: 2.528). Editor's Choice Collection.
- W. Galik¹, <u>P.M. Calvi</u> (2023). "Experimental and Numerical Response of Steel-Concrete Composite NPS® Beams", *Engineering Structures*, Vol. 290, 1 September 2023, 116362. (IF: 2.528)
- G. Rebecchi, <u>P.M. Calvi</u>, A. Bussini, D. Bolognini, L. Grottoli, Stefano Cii, Matteo Rosti, Francesco Ripamonti (2023). "Full-scale shake table tests of a reinforced concrete building equipped with a novel servo-hydraulic active mass damper", *Journal of Earthquake Engineering*, Vol. 27, Issue 10, 2702-2725. (IF: 2.779)
- M. Rosti, S. Cii, A. Bussini. <u>P.M. Calvi</u>, F. Ripamonti (2023). "Design and Validation of a Hardware-In-the-Loop Test Bench for Evaluating the Performance of an Active Mass Damper", *Journal of Vibration and Control*, Vol. 29, Issue 17-18. (IF: 3.095)
- N. Scattarreggia¹, W. Galik¹, <u>P.M. Calvi</u>, M. Moratti, A. Orgnoni¹, R. Pinho (2022) "Analytical and numerical analysis of the torsional response of the multi-cell deck of a collapsed cable-stayed bridge", *Engineering Structures*, Vol. 265, 15 August 2022, 114412. (IF: 2.528)
- 7. J. Stanton, <u>P.M. Calvi (2022).</u> "A Model for Stud Groups Subjected to Shear and Bending", *Engineering Structures*, 260 (2022) 114182. (IF: 2.528)
- P.M. Calvi, S. Ahn¹, D. Lehman (2022). "Shear Capacity of Cold Joints with Conventional and High-Strength Reinforcement", *ACI Structural Journal*, Vol 119, Issue 5. (IF: 1.287)
- 9. D. Voytko¹, <u>P.M. Calvi</u>, J. Stanton (2022). "Shear Strength of Ultra High-Performance Concrete", *Engineering Structures*, Volume 255, 113961. (IF: 2.528)
- A. Albright¹, A. Argentoni, <u>P.M. Calvi</u> (2022). "Experimental Behavior of Interior and Exterior Steel-Concrete Composite NPS[®] Beam-Column Joints", *Engineering Structures*, Volume 251, Part B, 113589. (IF: 2.528)
- E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u> (2022). "A simplified design procedure for seismic upgrade of frame structures equipped with hysteretic dampers", *Engineering Structures*, Volume 251, Part A, 113504. (IF: 2.528)

- T.J. Peruchini¹, J. Stanton, <u>P.M. Calvi</u> (2021). "Longitudinal Joints between Deck Bulb Tee Girders Made with Non-proprietary UHPC", *ASCE Bridge Journal*, Volume 26, Issue 12. (IF: 1.065)
- E. Bruschi¹, <u>P.M. Calvi</u>, V. Quaglini (2021). "Concentrated plasticity modelling of RC frames in time-history analyses", *Engineering Structures*, Volume 243, 15 September 2021, 112716. (IF: 2.528, GS: 1 citations)
- M. Furinghetti, T. Yang¹, <u>P.M. Calvi</u>, A. Pavese (2021). "Experimental Evaluation of Extra-Design Displacement Capacity for Curved Surface Slider Devices", *Soil Dynamics and Earthquake Engineering*, Volume 146, July 2021, 106752. (IF: 2.723, GS: 4 citations)
- L. Aragaw¹, <u>P.M. Calvi</u> (2021). "Earthquake-Induced Floor Accelerations in Rocking RC Shear Wall Structures", *Journal of Earthquake Engineering*, 25(5), pp. 941–969. DOI: 10.1080/13632469.2018.1548393. (IF: 2.754, GS: 5 citations)
- S. Timsina¹, <u>P.M. Calvi</u> (2021). "Variable Friction Base Isolation Systems: Seismic Performance and Preliminary Design", *Journal of Earthquake Engineering*, Volume 25, Issue 1, pp. 93–116. DOI: 10.1080/13632469.2018.1504837. (IF: 2.754, GS: 8 citations)
- T. Yang¹, S. Bergquist¹, <u>P.M. Calvi</u>, R. Wiebe (2021). "Improving Seismic Performance Using Adaptive Variable Friction Systems", *Engineering Structures*, Vol. 140, January 2021, 106442. (IF: 2.528, GS: 1 citations)
- T. Yang¹, N.A. Marafi, <u>P.M. Calvi</u>, R. Wiebe, M.O. Eberhard, J.W. Berman (2020). "Accounting for Spectral Shape in a Simplified Method of Analyzing Friction Pendulum Systems", *Engineering Structures*, Volume 222, 1 November 2020, 111002. (IF: 2.528, GS: 3 citations)
- O. Davadoorj¹, <u>P.M. Calvi</u>, J. Stanton (2020). "Experimental Response of Headed Stud Connections Subjected to Combined Shear and Bending Actions", *PCI Journal*, Volume 65, No 5, September-October 2020 Issue. (IF: 1.100)
- O. Davadoorj¹, <u>P.M. Calvi</u>, J. Stanton (2020). "Shear Stress Transfer across Concrete-to-Concrete Interfaces: Experimental Evidence and Available Strength Models", *PCI Journal*, Volume 64, No 4, July-August 2020. (IF: 1.100, GS: 4 citations). PCI Charles Z. Zollman Award.
- R. Davoudi, G.R. Miller, <u>P.M. Calvi</u>, J.N. Kutz (2020). "Computer Vision-Based Damage and Stress State Estimation for Reinforced Concrete and Steel Fiber-Reinforced Concrete Panels", *Structural Health Monitoring Journal*, Volume 19, Issue 6. DOI: 10.1177/1475921719892345. (IF: 4.939, GS: 4 citations)
- H. Zhang¹, <u>P.M. Calvi</u>, D. Lehman, K. Kuder, C. Roeder (2020). "Response of Recycled Coarse Aggregate Concrete Subjected to Pure Shear", *ASCE Journal of Structural Engineering*, DOI 10.1061/(ASCE)ST.1943-541X.0002620. (IF: 2.021)
- T. Yang¹, <u>P.M. Calvi</u>, R. Wiebe (2020). "Numerical Implementation of Variable Friction Sliding Base Isolators and Preliminary Experimental Results", *Earthquake Spectra*, Volume 36, Issue 2. DOI 10.1177/8755293019891721. (IF: 2.900, GS: 8 citations)
- L.F. Aragaw¹, <u>P.M. Calvi</u> (2020). "Comparing the Performance of Traditional Shear-Wall and Rocking Shear-Wall Structures Designed using the Direct-Displacement Based Design Approach", *Bulletin of Earthquake Engineering*, Volume 18, pp. 1345–1369. https://doi.org/10.1007/s10518-019-00740-y (IF: 2.406, GS: 6 citations)
- M. Moratti, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, C. Casotto, G.M. Calvi, D. Den Hertog, <u>P.M. Calvi</u>, G.T. Proestos (2019). "A Methodology for the Seismic Multilevel Assessment of Unreinforced Masonry Church Inventories in the Groningen Area",

Bulletin of Earthquake Engineering, Volume 17, Issue 8, pp. 4625-4650. https://doi.org/10.1007/s10518-019-00575-7. (IF: 2.406, GS: 7 citations)

- 26. G.M. Calvi, M. Moratti, G.J. O'Reilly, N. Scattarreggia¹, R. Monteiro, D. Malomo, <u>P.M. Calvi</u>, R. Pinho (2019). "Once upon a Time in Italy: The Tale of the Morandi Bridge", *Structural Engineering International*, Volume 29, Issue 2, pp. 198-217. (IF: 0.621, GS: 85 citations). IABSE 2020 Outstanding Paper Award.
- D. Perrone, <u>P.M. Calvi</u>, R. Nascimbene, E. Fischer, G. Magliulo (2019). "Seismic performance and damage observation of non-structural elements during the 2016 central Italy earthquakes", *Bulletin of Earthquake Engineering*, Volume 17, Issue 10, pp. 5655-5677. (IF: 2.406, GS: 69 citations)
- L. Di Sarno, F. da Porto, G. Guerrini, <u>P.M. Calvi</u>, G. Camata, A. Prota (2019). "Seismic performance assessment of bridges during the 2016 Central Italy earthquakes", *Bulletin of Earthquake Engineering*, Volume 17, Issue 10, pp. 5729-5761. (IF: 2.406, GS: 26 citations)
- S. Mazzoni, G. Castori, C. Galasso, <u>P.M. Calvi</u>, R. Dreyer, E. Fischer, A. Fulco, J. Wilson, A. Penna (2018). "2016-17 Central Italy Earthquake Sequence Seismic Retrofit Policy and Effectiveness", *Earthquake Spectra*, Volume 34, Issue 4, pp. 1671-1691. (IF: 2.900, GS: 29 citations)
- <u>P.M. Calvi</u>, G.T. Proestos, D.M. Ruggiero (2018). "Towards the Development of Direct Crack-Based Assessment of Structures", *ACI Structural Journal*, SP 328, pp. 9.1-9.20. (IF: 1.287, GS: 6 citations)
- <u>P.M. Calvi</u>, E.C. Bentz, M.P. Collins (2018). "Model for Assessment of Cracked Reinforced Concrete Membrane Elements Subjected to Shear and Axial Loads", *ACI Structural Journal*, Volume 115, No. 2, pp. 501-509. (IF: 1.287, GS: 12 citations)
- <u>P.M. Calvi</u>, G.M. Calvi (2018). "Historical development of friction-based seismic isolation systems", *Soil Dynamics and Earthquake Engineering*, Volume 106, pp. 14-30. (IF: 2.723, GS: 59 citations)
- <u>P.M. Calvi</u>, E.C. Bentz, M.P. Collins (2017). "The Pure Mechanics Crack Model for Cracked Reinforced Concrete Elements Transferring Shear and Axial Stresses", ACI Structural Journal, Volume 114, Issue 2, pp. 545-554. (IF: 1.287, GS: 14 citations)
- <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi (2016). "Seismic isolation devices based on sliding between surfaces with variable friction coefficient", *Earthquake Spectra*, Volume 32, Issue 4, pp. 2291-2315. (IF: 2.900, GS: 42 citations)
- <u>P.M. Calvi</u>, E.C. Bentz, M.P. Collins (2016). "Reversed Cyclic Experiments on Shear Stress Transfer across Cracks in Reinforced Concrete Elements", *ACI Structural Journal*, Volume 113, Issue 4, pp. 851-859. (IF: 1.287, GS: 15 citations)
- <u>P.M. Calvi</u>, D.M. Ruggiero (2016). "Numerical Modelling of Variable Friction Base Isolators", *Bulletin of Earthquake Engineering*, Volume 14, Issue 2, pp. 549-568. (IF: 2.406, GS: 25 citations)
- <u>P.M. Calvi</u>, T.J. Sullivan (2014). "Estimating Floor Spectra in Multiple Degree of Freedom Systems", *Earthquakes and Structures*, Volume 7, Issue 1, pp. 017-38. (IF: 1.573, GS: 86 citations)
- <u>P.M. Calvi</u> (2014). "Relative Displacement Floor Spectra for Seismic Design of Nonstructural Elements", *Journal of Earthquake Engineering*, Volume 18, Issue 7, pp. 1037-1059. (IF: 2.754, GS: 35 citations)

 T.J. Sullivan, <u>P.M. Calvi</u>, R. Nascimbene (2013). "Towards Improved Floor Spectra Estimates for Seismic Design", *Earthquakes and Structures*, Volume 4, Issue 1, pp. 109-132. (IF: 1.573, GS: 123 citations)

Conference proceedings and other non-journal articles *Fully refereed publications*

- 1. J. Berman, E. Fischer, M. Gardner, S. Kaushal, <u>P. Calvi</u> "Using Advanced Natural Hazards Technologies for Hazard Characterization and Building Evaluation", ASCE 10th Forensic Engineering Congress, Nov 1-4, 2024, Seattle, WA.
- D. Ji, Y. Turkan, <u>P.M. Calvi</u> "Deep Learning-based Surface Defect Detection: Threeclass Segmentation", ASCE International Conference on Computing in Civil Engineering, July 28-31, 2024, Hosted by Carnegie Mellon University Pittsburgh, Pennsylvania, USA
- F. Menardo, G. Rebecchi, M. Rosti, S. Cii, G. Ducoli, G. D'Agostino, A. Bussini, <u>P.M.</u> <u>Calvi</u>, M. Lenzi "A Novel Active Control System for the Seismic Protection of Structures: Technology and Application", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- 4. <u>P.M. Calvi</u>, U. Özçamur, S. Taniser, G.M. Calvi "Performance of Base Isolated Hospital Buildings during the 2023 Turkiye-Syria Earthquakes", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 July 5, 2024.
- W. Galik¹, <u>P.M. Calvi</u>, G. Andreotti "Discrete Modeling of Reinforced Concrete Crack Interfaces: A Crack-Based Assessment Perspective", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- <u>P.M. Calvi</u>, A. Argentoni, S. China "Seismic Design of the New Performance System Steel-Concrete Composite Moment Resisting Frame", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- M. Calò, G. Andreotti, <u>P. M. Calvi</u>, R. Monteiro "Exploring the Discrete Element Modeling Approach for Safety Assessment of Prestressed Concrete Bridges", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- P.M. Calvi, E. Che, L. Lowes, J. Berman "Terrestrial Laser Scanner Monitoring of a Full-Scale Reinforced Concrete Building Tested via Shake-Table", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- 9. W. Galik¹, <u>P.M. Calvi</u> "Numerical modeling of the response of the beam-column joint subassembly within a novel moment resisting frame system", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.
- 10. G. Rebecchi, F. Menardo, M. Rosti, A. Bussini, <u>P.M. Calvi</u> "Full-scale shake table tests of a R.C. building equipped with an active mass damper: experimental results and numerical simulations", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.
- 11. M. Casto, D. Perrone, <u>P.M. Calvi</u>, R. Nascmibene, M. A. Aiello "Toward a BIM-based procedure for the evaluation of a risk prioritization class of bridge structures", EUROSTRUCT 2023, 2nd Conference of the European Association on Quality Control of Bridges and Structures, Vienna, Austria, 27-29 September 2023.
- 12. G. Rebecchi, <u>P.M. Calvi</u>, A. Bussini, D. Bolognini, L. Grottoli, Stefano Cii, Matteo Rosti, Francesco Ripamonti "Full-scale shake table tests of a reinforced concrete structure equipped with a novel active mass damper", 3rd European Conference on Earthquake Engineering and Seismology, Bucharest, Romania, September 4th - September 9th, 2022.

- 13. E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u>, "A simplified design procedure for the seismic rehabilitation of RC framed structures with hysteretic damped braces", 3rd European Conference on Earthquake Engineering and Seismology, Bucharest, Romania, September 4th September 9th, 2022.
- 14. E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u>, "A simplified design procedure to improve the seismic performance of RC framed buildings with hysteretic damped braces", 5th edition of the International Symposium "New Metropolitan Perspectives", May 25th-May 27th, 2022, Università Mediterranea of Reggio Calabria, Italy. (GS: 0 citations)
- 15. E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u>, "Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses", Proc. of the 2nd fib Symposium on Concrete and Concrete Structures, Nov 18th-19th, 2021, Sapienza University, Rome, Italy. (GS: 0 citations)
- 16. A. Albright¹, A. Argentoni, <u>P.M. Calvi</u>, "Experimental investigation of interior and exterior steel-concrete composite NPS[®] beam-column joints", 9th International Conference on Composite Construction in Steel and Concrete, Stromberg, Germany, July 26-30,2021. (GS: 0 citations)
- 17. N. Scattarreggia¹, A. Orgnoni¹, D. Malomo, <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi, R. Pinho, "Computational forensic analysis of bridge collapses", SEI-ASCE Structures Congress 2021, Seattle, Washington, USA, March 10th to 13th 2021. (GS: 0 citations)
- 18. T.Z. Yeow, K. Kusunoki, I. Nakamura, Y. Hibino, T. Ohkubo, T. Seike, S. Yagi, T. Mukai, <u>P. M. Calvi</u>, M. Moustafa, S. Fukai, "The 2019 Tokyo Metropolitan Resilience Project E-Defense Test of a 3-Story Disaster Management Center", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan September 13th to 18th 2020. (GS: 1 citations)
- 19. T. Yang¹, N. Marafi, <u>P.M. Calvi</u>, R. Wiebe, M.O. Eberhard, J.W. Berman, "Evaluation of Displacement-Based Design Methods for Structures with Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 0 citations)
- 20. <u>P.M. Calvi,</u> T. Yang¹, R. Wiebe, "Development of Variable Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 0 citations)
- 21. M. Furinghetti, T. Yang¹, <u>P.M. Calvi</u>, A. Pavese, "Dynamic Response of Curved Surface Slider Devices under Severe Input Motions", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 1 citations)
- 22. H. Zhang¹, K. Kuder, D. Lehman, <u>P.M. Calvi</u>, C. Roeder, "Effect of Recycled Concrete Aggregate on the Shear Behavior of Reinforced Concrete Panels", Fifth International Conference on Sustainable Construction Materials and Technologies (SCMT5), London, UK, 14-17 July 2019. (GS: 0 citations)
- 23. T. Yang¹, N. Marafi, <u>P.M. Calvi</u>, R. Wiebe, "Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019. (GS: 1 citations)
- 24. S.A. Bergquist¹, <u>P.M. Calvi</u>, R. Wiebe, "Introducing Adaptive Variable Friction Base Isolation Systems", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019. (GS: 4 citations)
- 25. M. Moratti, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, G.M. Calvi, D. Den Hertog, <u>P.M.</u> <u>Calvi</u>, G.T. Proestos, "A Multilevel Methodology for the Seismic Assessment of Unreinforced Masonry Church Inventories in the Groningen Area", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)
- M. Moratti, F. Gaia, S. Martini, A. Tomasi, C. Tsioli, G. Grecchi, S. Ozcebe, G.M. Calvi, D. Den Hertog, <u>P.M. Calvi</u>, G.T. Proestos, "Seismic Assessment of Unreinforced

Masonry Terraced and Semi-Detached Houses in the Groningen Area, A Knowledge Based Support System", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)

- 27. T.Y. Yang¹, <u>P.M. Calvi</u>, R. Wiebe, "Numerical Implementation and Investigation of Variable Friction Sliding Base Isolators", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018. (GS: 1 citations)
- 28. L. Aragaw¹, <u>P.M. Calvi</u>, "Floor Spectra in Hybrid Base-Rocking Wall Buildings", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018. (GS: 0 citations)
- 29. S. Timsina¹, <u>P.M. Calvi</u>, "Damping properties of variable friction base isolation systems", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 5 citations)
- 30. A. Christman¹, <u>P.M. Calvi</u>, "Seismic Risk Assessment of Reinforced Concrete Bridges in Washington State Using a Performance Based Adaptive Methodology", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)
- <u>P.M. Calvi</u>, G.T. Proestos, D.M. Ruggiero, "Towards the Development of Direct Crack-Based Assessment of Structures", *ACI Convention*, March 25-29 2018, Salt Lake City, UT. (GS: 1 citations)
- 32. G.M. Calvi, <u>P.M. Calvi</u>, M. Moratti (2017). "Seismic isolation of buildings using devices based on sliding between surfaces with variable friction coefficient", *Innovative Infrastructure Solutions*, Volume 2, Issue 1, pp. 39. (GS: 3 citations)
- 33. <u>P.M. Calvi</u>, S. Timsina¹, "Numerical Study of the seismic behavior of variable friction base isolation system", 39th IABSE Symposium – Engineering the Future, September 21-23 2017, Vancouver, Canada. (GS: 7 citations)
- 34. <u>P.M. Calvi</u>, D.M. Ruggiero "Earthquake-Induced Floor Accelerations in Base Isolated Structures", 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago Chile, January 9th to 13th 2017. (GS: 4 citations)
- 35. <u>P.M. Calvi</u>, E.C. Bentz, M.P. Collins "Shear Stress Transfer across Major Cracks in Reinforced Concrete", Proceedings of the 10th fib International PhD Symposium in Civil Engineering July 21 to 23, 2014, Université Laval, Québec, Canada. (GS: 0 citations)
- 36. <u>P.M. Calvi</u>, T.J. Sullivan, "Improved estimation of floor spectra in RC wall buildings", Proceedings of the 10th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014. (GS: 3 citations)

Refereed by abstract only

- 1. D. Ji, Y. Turkan, <u>P.M. Calvi</u> "AI-Enabled Drone Image Processing for Rapid Bridge Inspection and Management", EMI 2022, May 31-June 3 2022, Baltimore, Maryland, US. (GS: 0 citations)
- 2. E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u>, "Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses", 2nd fib Symposium on Concrete and Concrete Structures, 18-19 November 2021 in Rome, Italy. (GS: 0 citations)
- 3. T.J. Peruchini¹, J. Stanton, <u>P.M. Calvi</u>, "Longitudinal Deck Joints between Concrete Girders Made Using UHPC", The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA October 1st to 4th, 2019. (GS: 0 citations)
- 4. A. Orgnoni¹, N. Scattarreggia¹, D. Malomo, <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi, R. Pinho "Seismic Assessment of Concrete Balanced-System Bridges", The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA October 1st to 4th, 2019. (GS: 0 citations)

- T. Yang¹, U. Ozcamur, <u>P.M. Calvi</u>, R. Wiebe, E. Bruschi¹, V. Quaglini, H. Sucuoglu, A. Pavese, "Experimental Investigation of the Behavior of Variable Friction Base Isolation Systems", Proceedings of the 7th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete island, Greece, 24-26 June, 2019. (GS: 3 citations)
- 6. H. Aghabeigi, G. Proestos, <u>P.M. Calvi</u> "Seismic Assessment of a Full-Scale Rocking Shear Wall Structure", Proceedings of the 5th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete Island, Greece, 25 - 27 May 2015. (GS: 0 citations)
- T.J. Sullivan, <u>P.M. Calvi</u>, D.P. Welch, "Estimating roof-level acceleration spectra for single storey buildings", Proceedings of the 4th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos island, Greece, 2013. (GS: 3 citations)
- <u>P.M. Calvi</u>, M. Pingaro, P. Venini, "Truly-mixed finite-elements for the analysis of viscoelastic devices", Proceedings of the 20th AIMETA Conference, Bologna, Italy, 2011. (GS: 0 citations)
- 9. <u>P.M. Calvi</u>, P. Venini, "Toward a novel approach for damage identification and health monitoring of bridge structures", Proceedings of the 19th AIMETA Conference, Ancona, Italy, 2009. (GS: 0 citations)

Complete books written

None

Parts of books (chapters in edited books)

- 1. G.M. Calvi, M. Moratti, N. Scattarreggia¹, V. Özsaraç, <u>P.M. Calvi</u>, R. Pinho, "Numerical investigations on the collapse of the Morandi Bridge", Springer Tracts on Transportation and Traffic, 2021, 17, pp. 3–18.
- 2. E. Bruschi¹, V. Quaglini, P.M. Calvi, "A Simplified Design Procedure to Improve the Seismic Performance of RC Framed Buildings with Hysteretic Damped Braces", in New Metropolitan Perspectives, January 2022.

Books edited

None

Journal issues edited None

Patents submitted and/or awarded None

Papers submitted (for refereed archival journal publication)

- 1. D. Ji, Y. Turkan, <u>P.M. Calvi</u>, "Toward Automated Crack Detection and Measurements for Rapid Structural Inspections", *Structural Health Monitoring*.
- 2. J.P. Gaston¹, B. Farag¹, T. Thonstad, <u>P.M. Calvi</u> "Shear Behavior of Marco-Synthetic Fiber-Reinforced Concrete", *ACI Structural Journal*

Papers in preparation (for refereed archival journal publication)

1. S. Turner¹, J. Stanton, <u>P.M. Calvi</u> "Experimental response of prestressed concrete hollow piles subject to shear and bending" *TBD*.

- 2. B. Farag¹, <u>P.M. Calvi</u>, T. Thonstad "Numerical Modeling of Distributed Macro-Synthetic Fiber and Deformed Bar Reinforced Concrete Elements Subjected to Shear Forces", *TBD*
- 3. B. Farag¹, <u>P.M. Calvi</u>, T. Thonstad "Estimating the Shear Strength of Concrete Elements Containing Distributed Macro-Synthetic Fiber and Deformed Bar Reinforcement", *TBD*
- 4. W. Galik¹, <u>P.M. Calvi</u>, G. Andreotti "Discrete Modeling of Reinforced Concrete Crack Interfaces subject to Monotonic Loads", *TBD*.
- 5. <u>P.M. Calvi</u> et al. "Assessing the Shear Strength of Circular Reinforced Concrete Columns", *TBD*
- 6. T. Tardieau¹, S. Turner¹, J. Stanton, <u>P.M. Calvi</u> "Reversed Cyclic Experimental Behavior of Hollow Core Prestressed Concrete Bridge Column-Piles" *TBD*.
- W. Galik¹, <u>P.M. Calvi</u> "Finite Element Modeling of Steel-Concrete Composite NPS® Beam-Column Joints Subject to Reversed Cyclic Loads", *Engineering Structures*. (IF: 2.528)
- 8. W. Galik¹, <u>P.M. Calvi</u> "Sectional analysis of multi-cell cross sections subject to simultaneous flexure, shear and torsion" *TBD*.

Abstracts, letters, non-refereed papers, technical reports

Non-refereed papers

- 1. A. Albright¹, A. Argentoni, G. Faga, <u>P.M. Calvi</u> (2022). "Experimental Behavior of Interior and Exterior Steel-Concrete Composite NPS[®] Beam-Column Joints", *Progettazione Sismica*
- 2. <u>P.M. Calvi</u>, G. Faga, G.M. Calvi (2018). "Sviluppo storico dei sistemi di isolamento sismico ad attrito", *Progettazione Sismica*, Volume 10, Issue 2 (In Italian). (GS: 0 citations)
- 3. <u>P.M. Calvi</u>, M. Moratti, A. Filiatrault (2015). "Role and importance of non-structural elements in the seismic vulnerability of school buildings", *Progettazione Sismica*, Volume 6, Issue 3 (In Italian). (GS: 4 citations)
- T.J. Sullivan, <u>P.M. Calvi</u>, D. Bolognini (2015). "Evaluation of floor spectra for the seismic design of non-structural elements", *Progettazione Sismica*, Volume 6, Issue 3 (In Italian). (GS: 1 citations)
- 5. <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi (2015). "Seismic isolation devices based on variable friction sliding materials", *Progettazione Sismica*, Volume 6, Issue 1 (In Italian). (GS: 0 citations)

Technical reports

- 1. <u>P.M. Calvi</u>, "Nuova Torre dei Piloti di Genova: Progettazione Preliminare di un Sistema Smorzante a Controllo Attivo per Mitigare gli Effetti Dinamici del Vento", Technical Report (in Italian) Submitted to the Port of Genoa, Italy, April 18, 2024.
- 2. <u>P.M. Calvi</u>, "Nuova Torre dei Piloti di Genova: Analisi Preliminare degli Effetti Dinamici del Vento", Technical Report (in Italian) Submitted to the Port of Genoa, Italy, February 5, 2024.
- 3. T. Thonstad, <u>P.M. Calvi</u>, J.P. Gaston¹, "Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete", Technical Report submitted to Concrete Research Council of ACI, December 2023.
- 4. <u>P.M. Calvi</u>, "Seismic Response of Exterior Steel-Concrete Composite NPS Beam-Column Joints", Technical Report submitted to TECNOSTRUTTURE, August 2023.

- <u>P.M. Calvi</u>, L. Lowes, "RAPID/Collaborative Research: Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures", Final Report, National Science Foundation (NSF), Award Number: 2000478, March 2023.
- 6. Y. Turkan, <u>P.M. Calvi</u>, D. Ji, "Lidar, Drones and Brim for Rapid Bridge Inspection and Management", Technical Report, Pacific Northwest Transportation Consortium (PacTrans), April 2023.
- D. Voytko¹, <u>P.M. Calvi</u>, J. Stanton, "Development of Non-Proprietary UHPC Mix Evaluation of the Shear Strength of UHPC", Report No. ABC-UTC-2016-C2-UW01 – Final, Accelerated Bridge Construction University Transportation Center, January 2024.
- 8. T. Thonstad, <u>P.M. Calvi</u>, J.P. Gaston¹, "Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete", Technical Report submitted to Concrete Research Council of ACI, December 2022.
- 9. W. Galik¹, <u>P.M. Calvi</u>, "Shear behavior of steel-concrete composite "NPS Basic beams", Technical Report submitted to TECNOSTRUTTURE, March 2022.
- 10. W. Galik¹, <u>P.M. Calvi</u>, "Seismic Performance of Steel-Concrete composite NPS Beam-Column Joints", Technical Report submitted to TECNOSTRUTTURE, April 2022.
- 11. <u>P.M. Calvi</u>, A. Albright¹, "Experimental behavior of NPS beam-column joints", Technical Report submitted to TECNOSTRUTTURE, December 2020.
- 12. <u>P.M. Calvi</u>, D. Lehman, S. Ahn¹, "Shear Friction Capacity of Concrete Joints with High Strength Reinforcement", Technical Report submitted to Concrete Research Council of ACI, November 2020.
- 13. J. Stanton, <u>P.M. Calvi</u>, T. Tardieu¹, S. Turner¹, "Use of Hollow Prestressed Concrete Pile-Columns for Bridges in Seismic Regions" Washington (State). Dept. of Transportation. Office of Research and Library Services, 2020.
- Al. et <u>P.M. Calvi</u>, "D9.1 Technical report on SERA Transnational Access activities TA1-TA10 M24", Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe, Work Package WP8-WP17, April 30, 2020.
- 15. <u>P.M. Calvi</u>, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Explanatory Notes on Design Recommendations", Technical Report submitted to TECNOSTRUTTURE, February 2020.
- 16. <u>P.M. Calvi</u>, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints. Beam-Column Joints and Plastic Hinge Regions: Proposed Experimental Program", Technical Report submitted to TECNOSTRUTTURE, January 2020.
- 17. <u>P.M. Calvi</u>, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Special Considerations for Beam-Column Joints and Plastic Hinge regions", Technical Report submitted to TECNOSTRUTTURE, November 2019.
- 18. <u>P.M. Calvi</u>, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Design Recommendations", Technical Report submitted to TECNOSTRUTTURE, October 2019.
- 19. T.J. Peruchini¹, J. Stanton, <u>P.M. Calvi</u>, "Investigation of Ultra High-Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders", Washington (State). Dept. of Transportation. Office of Research and Library Services, 2017. (GS: 2 citations)
- <u>P.M. Calvi</u>, "A theory for the shear behaviour of cracks providing a basis for the assessment of cracked reinforced concrete structures", PhD dissertation, University of Toronto, Canada, June 2015. (GS: 8 citations)
- 21. <u>P.M. Calvi</u>, M. Moratti, A. Filiatrault, "Analisi della Risposta di Elementi Non Strutturali durante Terremoti Passati", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, June, 2015.

- 22. <u>P.M. Calvi</u>, A. Filiatrault, "Assessment of Cracked Reinforced Concrete Bridge Structures", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, December 31, 2014.
- 23. <u>P.M. Calvi</u>, A. Filiatrault, "Vulnerabilità degli Elementi non Strutturali in Edifici Scolastici", technical report (in Italian) submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, December 1, 2014.
- 24. <u>P.M. Calvi</u>, A. Filiatrault, "Role and Importance of Non-Structural Elements in the Seismic Vulnerability of School Buildings in Past Earthquakes", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, November 1, 2014.

Other significant research dissemination (web sites, software, Wikis, etc.)

Calvi, P. Lowes, L. Moustafa, M. Berman, J. Sweet, T. Zdebski, J. Lyda, A. Che, E. (2023) "Shake Table Damage Detection with Terrestrial Laser Scanners", in *RAPID: Data collection at 2019 E-Defense RC Moment Frame Testing*. DesignSafe-CI. <u>https://doi.org/10.17603/ds2-qv7d-a845</u> v1.

OTHER SCHOLARLY ACTIVITY

Invited lectures and seminars

- 1. XIII CONVEGNO INTERNAZIONALE CIAS. "Long-Term Performance of Friction-Based Seismic Isolation Systems e", Marrakech, Morocco, April 21-27, 2024.
- 2. Course "Reinforced Concrete Structure" part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2022.
- 3. ABC-UTC Webinar, Behavior and Strength of UHPC in Shear, July 30th, 2021.
- 4. NHERI-NIED/E-Defense 4th Collaboration Meeting, Remote, Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures, December 2020.
- 5. Joint NHERI@UC San Diego RAPID Researcher Workshop 2020, Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures, December 2020.
- 6. 2019 NHERI-E-Defense Meeting, Miki, Japan, Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures, December 2019.
- 7. SEAW Seattle Chapter and Southwest Chapter Joint Meeting, *Response to the August 24, 2016 Central Italy Earthquake*, April 2017.
- 8. University of Liege, Belgium, *Advanced Design of Reinforced Concrete Structures*, Short Course, December 2016.
- 9. ARUP, Toronto, Canada, Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions, April 2015.
- 10. University of Nevada, Reno, Department of Civil and Environmental Engineering, Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions, April 2015.
- 11. University of Washington, Seattle, Department of Civil and Environmental Engineering, Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions, March 2015.
- 12. University at Buffalo, The State University of New York, Department of Civil, Structural and Environmental Engineering Performance, *Towards Floor Response Spectra Estimates for Seismic Design*, February 2013.

- 13. University of Toronto, Department of Civil and Environmental Engineering, *Response of Heavily Cracked RC Membrane Elements Subjected to Cyclic and Reverse Cyclic Loads*, October 2012.
- 14. Queen's University, Department of Civil and Environmental Engineering, An *Experimental Campaign: Preliminary Results on Aggregate Interlock Behaviour*, October 2011.

Presentations given at conferences (presenter in bold)

- 1. **J. Berman**, E. Fischer, M. Gardner, S. Kaushal, <u>P. Calvi</u> "Using Advanced Natural Hazards Technologies for Hazard Characterization and Building Evaluation", ASCE 10th Forensic Engineering Congress, Nov 1-4, 2024, Seattle, WA.
- D. Ji, Y. Turkan, <u>P.M. Calvi</u> "Deep Learning-based Surface Defect Detection: Threeclass Segmentation", ASCE International Conference on Computing in Civil Engineering, July 28-31, 2024, Hosted by Carnegie Mellon University Pittsburgh, Pennsylvania, USA
- F. Menardo, G. Rebecchi, M. Rosti, S. Cii, G. Ducoli, G. D'Agostino, A. Bussini, <u>P.M.</u> <u>Calvi</u>, M. Lenzi "A Novel Active Control System for the Seismic Protection of Structures: Technology and Application, 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- <u>P.M. Calvi</u>, U. Özçamur, S. Taniser, G.M. Calvi "Performance of Base Isolated Hospital Buildings during the 2023 Turkiye-Syria Earthquakes", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- W. Galik¹, <u>P.M. Calvi</u>, G. Andreotti "Discrete Modeling of Reinforced Concrete Crack Interfaces: A Crack-Based Assessment Perspective", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- P.M. Calvi, A. Argentoni, S. China "Seismic Design of the New Performance System Steel-Concrete Composite Moment Resisting Frame", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- M. Calò, G. Andreotti, <u>P. M. Calvi</u>, R. Monteiro "Exploring the Discrete Element Modeling Approach for Safety Assessment of Prestressed Concrete Bridges", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- <u>P.M. Calvi</u>, E. Che, L. Lowes, J. Berman "Terrestrial Laser Scanner Monitoring of a Full-Scale Reinforced Concrete Building Tested via Shake-Table", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
- 6. W. Galik¹, <u>P.M. Calvi</u> "Numerical modeling of the response of the beam-column joint subassembly within a novel moment resisting frame system", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.
- 7. <u>P.M. Calvi</u> "Long-Term Performance of Friction-Based Seismic Isolation Systems", Centro Internazionale di Aggiornamento Sperimentale-Scientifico (CIAS), Cadi Ayyad University, Marrakech, Morocco, April 21-27, 2024.
- 8. **T. Thonstad**, <u>P.M. Calvi</u>, J.P. Gaston¹ "Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces." Accelerated Bridge Construction University Transportation Center 2023 Research Day 1, Miami, FL, May 2023.
- 9. **T. Thonstad**, <u>P.M. Calvi</u>, "Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces." Accelerated Bridge Construction University Transportation Center 2022 Research Day 2 Miami, FL, November 2022.

- 10. J.P. Gaston¹, T. Thonstad, <u>P.M. Calvi</u> "Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete", ACI Concrete Convention, October 23-27 2022, Dallas, TX, US
- 11. D. Ji, Y. Turkan, <u>P.M. Calvi</u> "AI-Enabled Drone Image Processing for Rapid Bridge Inspection and Management", EMI 2022, May 31-June 3 2022, Baltimore, Maryland, US.
- 12. **E. Bruschi¹**, V. Quaglini, <u>P.M. Calvi</u> (2022). "A simplified design procedure to improve the seismic performance of RC framed buildings with hysteretic damped braces", 5th edition of the International Symposium "New Metropolitan Perspectives", May 25th-May 27th, 2022, Università Mediterranea of Reggio Calabria, Italy.
- E. Bruschi¹, V. Quaglini, <u>P.M. Calvi</u>, "Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses", Proc. of the 2nd fib Symposium on Concrete and Concrete Structures, Nov 18th-19th, 2021, Sapienza University, Rome, Italy.
- 14. A. Albright¹, A. Argentoni, <u>**P.M. Calvi**</u>, "Experimental investigation of interior and exterior steel-concrete composite NPS[®] beam-column joints", 9th International Conference on Composite Construction in Steel and Concrete, Stromberg, Germany, July 26-30,2021.
- <u>P.M. Calvi</u>, T. Sweet¹, L.N. Lowes, J.W. Berman "Lidar Evaluation of Damage to a Reinforced Concrete Moment Frame Structure", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
- 16. T.Z. Yeow, K. Kusunoki, I. Nakamura, Y. Hibino, T. Ohkubo, T. Seike, S. Yagi, T. Mukai, <u>P. M. Calvi</u>, M. Moustafa, S. Fukai, "The 2019 Tokyo Metropolitan Resilience Project E-Defense Test of a 3-Story Disaster Management Center", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan September 27th to October 2nd 2021.
- 17. T. Yang¹, N. Marafi, <u>P.M. Calvi</u>, R. Wiebe, M.O. Eberhard, J.W. Berman, "Evaluation of Displacement-Based Design Methods for Structures with Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
- P.M. Calvi, T. Yang¹, R. Wiebe, "Development of Variable Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan -September 27th to October 2nd 2021.
- 19. **M. Furinghetti**, T. Yang¹, <u>P.M. Calvi</u>, A. Pavese, "Dynamic Response of Curved Surface Slider Devices under Severe Input Motions", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan September 27th to October 2nd 2021.
- N. Scattarreggia¹, A. Orgnoni¹, **D. Malomo**, <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi, R. Pinho, "Computational forensic analysis of bridge collapses", SEI-ASCE Structures Congress 2021, Seattle, Washington, USA, March 10th to 13th 2021.
- S. Ahn¹, <u>P.M. Calvi</u>, D. Lehman, "Shear Friction Capacity of Concrete Cold Joints", ACI Convention, October 20-24 2019, Cincinnati, OH, USA.
- T.J. Peruchini¹, J. Stanton, <u>P.M. Calvi</u>, "Longitudinal Deck Joints between Concrete Girders Made Using UHPC", The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA - October 1st to 4th, 2019.
- 23. A. Orgnoni¹, N. Scattarreggia¹, D. Malomo, <u>P.M. Calvi</u>, M. Moratti, G.M. Calvi, R. Pinhom "Seismic Assessment of Concrete Balanced-System Bridges", The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA October 1st to 4th, 2019.
- 24. H. Zhang¹, K. Kuder, D. Lehman, <u>P.M. Calvi</u>, C. Roeder, "Effect of Recycled Concrete Aggregate on the Shear Behavior of Reinforced Concrete Panels", Fifth International Conference on Sustainable Construction Materials and Technologies (SCMT5), London, UK, 14-17 July 2019.

- 25. T. Yang¹, U. Ozcamur, <u>P.M. Calvi</u>, R. Wiebe, E. Bruschi¹, V. Quaglini, H. Sucuoglu, A. Pavese, "Experimental Investigation of the Behavior of Variable Friction Base Isolation Systems", Proceedings of the 7th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete island, Greece, 24-26 June, 2019.
- 26. T. Yang¹, N. Marafi, <u>P.M. Calvi</u>, R. Wiebe, "Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019.
- 27. S.A. Bergquist¹, <u>P.M. Calvi</u>, R. Wiebe, "Introducing Adaptive Variable Friction Base Isolation Systems", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019.
- 28. S. Ahn¹, <u>P.M. Calvi</u>, D. Lehman, "Shear Friction Capacity of Concrete Joints with High Strength Reinforcement", *ACI Convention*, October 14-18 2018, Las Vegas, NV, USA.
- 29. M. Moratti, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, G.M. Calvi, D. Den Hertog, <u>P.M. Calvi</u>, G.T. Proestos, "A Multilevel Methodology for the Seismic Assessment of Unreinforced Masonry Church Inventories in the Groningen Area", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
- 30. M. Moratti, F. Gaia, S. Martini, A. Tomasi, C. Tsioli, G. Grecchi, S. Ozcebe, G.M. Calvi, D. Den Hertog, <u>P.M. Calvi</u>, G.T. Proestos, "Seismic Assessment of Unreinforced Masonry Terraced and Semi-Detached Houses in the Groningen Area, A Knowledge Based Support System", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
- T.Y. Yang¹, <u>P.M. Calvi</u>, R. Wiebe, "Numerical Implementation and Investigation of Variable Friction Sliding Base Isolators", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018.
- 32. L. Aragaw¹, <u>P.M. Calvi</u>, "Floor Spectra in Hybrid Base-Rocking Wall Buildings", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018.
- 33. S. Timsina¹, <u>P.M. Calvi</u>, "Damping properties of variable friction base isolation systems", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
- 34. A. Christman¹, <u>P.M. Calvi</u>, "Seismic Risk Assessment of Reinforced Concrete Bridges in Washington State Using a Performance Based Adaptive Methodology", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
- P.M. Calvi, G.T. Proestos, D.M. Ruggiero, "Towards the Development of Direct Crack-Based Assessment of Structures", ACI Convention, March 25-29 2018, Salt Lake City, UT, USA.
- G.M. Calvi, <u>P.M. Calvi</u>, M. Moratti (2017). "Seismic isolation of buildings using devices based on sliding between surfaces with variable friction coefficient", *Innovative Infrastructure Solutions*, Volume 2, Issue 1, pp. 39.
- <u>P.M. Calvi</u>, S. Timsina¹, "Numerical Study of the seismic behavior of variable friction base isolation system", 39th IABSE Symposium – Engineering the Future, September 21-23 2017, Vancouver, Canada.
- <u>P.M. Calvi</u>, D.M. Ruggiero "Earthquake-Induced Floor Accelerations in Base Isolated Structures", 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago Chile, January 9th to 13th 2017.
- 39. H. Aghabeigi, G. Proestos, <u>P.M. Calvi</u> "Seismic Assessment of a Full Scale Rocking Shear Wall Structure", Proceedings of the 5th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete Island, Greece, 25 - 27 May 2015.

- 40. <u>P.M. Calvi</u>, E.C. Bentz, M.P. Collins "Shear Stress Transfer across Major Cracks in Reinforced Concrete", Proceedings of the 10th fib International PhD Symposium in Civil Engineering July 21 to 23, 2014, Université Laval, Québec, Canada.
- 41. <u>P.M. Calvi</u>, **T.J. Sullivan**, "Estimating Floor Spectra in Multiple Degree of Freedom Systems", Proceedings of the 10th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014.
- 42. **T.J. Sullivan**, <u>P.M. Calvi</u>, D.P. Welch, "Estimating roof-level acceleration spectra for single storey buildings", Proceedings of the 4th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos island, Greece, 2013.
- 43. <u>P.M. Calvi</u>, M. Pingaro, **P. Venini**, "Truly-mixed finite-elements for the analysis of viscoelastic devices", Proceedings of the 20th AIMETA Conference, Bologna, Italy, 2011.
- 44. <u>P.M. Calvi</u>, **P. Venini**, "Toward a novel approach for damage identification and health monitoring of bridge structures", Proceedings of the 19th AIMETA Conference, Ancona, Italy, 2009.

Professional society memberships.

American Concrete Institute (ACI), 2016 - present Earthquake Engineering Research Institute (EERI), 2016 - present International Association for Bridge and Structural Engineering (IABSE), 2016 – 2019 Member of Italian Society for Civil Engineering, 2011 - present

Referee/Reviewer

Journals (incomplete list): Journal of Earthquake Engineering, Earthquake Engineering and Engineering Vibration, ACI Structural Journal, Earthquake Spectra, Smart Structures and Systems, An International Journal, Engineering Structures, Journal of Structural Engineering, International Journal of Advanced Structural Engineering, European Journal of Environmental and Civil Engineering, Civil Engineering Infrastructures Journal, Geosciences.

Conferences (some examples): 15th World Conference on Earthquake Engineering (Lisbon, September 2012), 39th IABSE Symposium – Engineering the Future (Vancouver, September 2017), 16th World Conference on Earthquake Engineering (Santiago, Chile 2017), 16th European Conference on Earthquake Engineering.

GRADUATE STUDENTS

Chaired Doctoral Students

Student Name	My Role	Dissertation Topic	Completed	Current Employer
Tianye Yang	Co-chair (w/ Wiebe)	High Performance Friction Type Bearings for Seismic Isolation	Spring, 2020	Simpson Gumpertz & Heger
Eleonora Bruschi	Co-chair (w/ Quaglini)	Design and characterization of Lead-Extrusion Dampers with adaptive behaviour	Autumn 2021	Polytechnic of Milan

Current Doctoral Students

Student Name	My Role	Dissertation Topic	Status	Estimated Completion
William Galik	Chair	Crack-based assessment of earthquake damaged reinforced- concrete structures	Passed qualifying exam	Spring, 2025
Luca Zoccolini	Co-chair (w/ Quaglini)	Seismic Response of Buildings Equipped with a Novel Viscous Damper	Passed qualifying exam	Autumn, 2025
Aldo Rapone	Co-chair (w/ Gabbianelli)	Long-Term Performance Assessment of Base Isolated Buildings through Field Testing	Passed qualifying exam	Autumn, 2026
Daniel Gaxiola	Co-chair (w/ Stanton and Thonstad)	Design and Testing of High-Load Multi-Rotational Disc Bearings for Bridges	Pre- qualifying exam	Spring, 2028
TBD	Chair	Performance and Cost-Benefit Analysis of Temporary Modular Bridges	TBD	Spring, 2028

Chaired Masters Students

Student Name	My Role	Level of Supervision	Thesis Topic	Completed (year)	Current Employer
John Paul Gaston	Co-chair (w/ Thonstad)	MSCE Thesis	Shear Behavior of Macro- Synthetic Fiber-Reinforced Concrete Panels	Spring 2023	KPFF
William Galik	Chair	MSCE Thesis	The Use of Analytical and Numerical Methods to Investigate the Timing of the Morandi Bridge Collapse	Summer 2021	IUSS Pavia, Italy
Ann Albright	Chair	MSCE Thesis	Experimental Study on Steel- Concrete Composite NPS System Beam Column Joints Under Reversed Cyclic Earthquake Loading	Spring 2021	Virginia Tech
Danielle Voytko	Co-chair (w/ Stanton)	MSCE Thesis	Evaluation of the Shear Strength of Ultra High- Performance Concrete	Spring 2021	Unknown
Tatsuiko Sweet	Co-chair (w/ Lowes)	MSCE Research Project	NA	Winter 2021	University of Washington
Stephan Ahn	Co-chair (w/ Lehman)	MSCE Thesis	Shear Friction Capacity of Concrete Joints with High Strength Reinforcement	Spring, 2020	Mackenzie, Seattle
Sam Turner	Co-chair (w/ Stanton)	MSCE Thesis	Seismic Retrofit of Bridges Supported on Hollow Core Prestressed Concrete Pile- Columns	Winter, 2020	Coughlin Porter Lundeen
Sarah Bergquist	Co-chair (w/	MSCE Thesis	Behavior and Design of an Adaptive Variable Friction	Spring, 2019	Degenkolb Engineers

Student Name	My Role	Level of Supervision	Thesis Topic	Completed (year)	Current Employer
	Wiebe)		Base-Isolation System		
Tasha Tardieu	Co-chair (w/ Stanton)	MSCE Thesis	Seismic Evaluation of Hollow Core Prestressed Concrete Bridge Column-Piles in Washington State	Spring, 2019	Unknown
Audrey Davaadorj	Co-chair (w/ Stanton)	MSCE Thesis	Shear Stress Transfer across Concrete-to-Concrete and Steel-to-Concrete Interfaces	Spring, 2018	KPFF Consulting Engineers
Timothy Peruchini	Co-chair (w/ Stanton)	MSCE Thesis	Investigation of Ultra High- Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders	Winter, 2017	Reid Middleton
Sandip Timsina	Chair	MSCE Thesis	A Study of Variable Friction Base Isolation Systems	Spring, 2017	Fossatti Pawlak Structural Engineers
Abigail Christman	Chair	MSCE Thesis	Earthquake Risk Assessment of Reinforced Concrete Bridges in Washington State Using Pushover Analysis	Spring, 2017	Thornton Tomasetti
Leikune Aragaw	Chair	MSCE Thesis	Floor Response Spectra in Hybrid Base-Rocking and Reinforced Concrete Wall Buildings	Spring, 2017	Magnusson Klemencic Associates

Current Masters Students

Student Name	My Role	Level of Supervision	Status	Estimated Completion
Benedikt Farag	Chair	MSCE Thesis	Started in Autumn 2022	Spring 2024

Undergraduate Students Supervision (not updated)

Student Name	My Role	Level of Supervision	Status	Estimated Completion
Younis Riyami	Advisor	Individual Study	Completed	Spring, 2020
Ian McWhirter	Advisor	Individual Study	Completed	Summer/Fall, 2017
Dakota Hunsaker	Advisor	Individual Study	Completed	Summer, 2017

Other Significant Student Supervision

Visiting graduate student advising

Student Name	My Role	Level of Supervision	Home Institution	Dates of Supervision
Nicola Scattarreggia (PhD)	Advisor during visitation	PhD Dissertation	IUSS Pavia (Italy)	2020-2021
Andrea Orgnoni	Advisor during	PhD	IUSS Pavia	2020-2021

Student Name	My Role	Level of Supervision	Home Institution	Dates of Supervision
(PhD)	visitation	Dissertation	(Italy)	
Huang Weiguo (PhD)	Advisor during visitation (co-advisor: Wiebe)	Research project	Nanjing Tech University, China	2020-2021
Mohamad Alipour (PhD)	Co-advisor during visitation (advisor: Miller)	Research project	University of Virginia	2018
Huan Zhang (PhD)	Advisor during visitation (co-advisor: Lehman)	Research project	HIT (China)	2018-2019
Alexander Kagermanov (Post-Doc)	Advisor during visitation	Research project	UME School (Italy)	2016-2017
Giulia Scagliotti (MSCE)	Advisor during visitation	MSCE Thesis	University of Pavia, Italy	2016-2017 (Graduation 2017)

Membership on PhD degree committees

Student Name	Department, Institution	Degree	Date
Donghoon Ji	Civil and Construction Engineering	PhD	2024 (expected)
Andrea Natale	CEE, University of Naples "Federico II"	PhD	2023 (expected)
Sarah Wichman	CEE, UW	PhD	Autumn, 2023
Jarrod Zaborac	CEE, UT Austin	PhD	Spring, 2021
Tom Lin	CEE, UW	PhD	Autumn, 2021
Kamal Ahmed	CEE, UW	PhD	Summer, 2021
Nikola Tatar	CEE, University of Liege	PhD	Fall, 2020
Rouzbeh Davoudi	CEE, UW	PhD	Spring 2019
A. Gonzalez-Fonseca	CEE, IUSS Pavia	PhD	Winter, 2016
D. Welch	CEE, IUSS Pavia	PhD	Winter, 2016
A. Kagermanov	CEE, IUSS Pavia	PhD	Winter, 2016
R. Milanesi	CEE, IUSS Pavia	PhD	Winter, 2016
C. Nievas	CEE, IUSS Pavia	PhD	Winter, 2016
G. O'Reilly	CEE, IUSS Pavia	PhD	Winter, 2016
M. Oliaee	CEE, IUSS Pavia	PhD	Winter, 2016
A. Rosti	CEE, IUSS Pavia	PhD	Winter, 2016
C. Zelaschi	CEE, IUSS Pavia	PhD	Winter, 2016

Membership on Masters' degree committees

Student Name	Department	Degree	Date
Hank Knight	CEE, UW	MSCE	Spring, 2023
Josh Stokley	CEE, UW	MSCE	Autumn, 2022
Carolyn Donohoe	CEE, UW	MSCE	Summer, 2022
Benjamin Terry	CEE, UW	MSCE	Summer, 2022
Ray Yu	CEE, UW	MSCE	Summer, 2021
Kayla Wielgus	CEE, UW	MSCE	Spring, 2020
Anne Magnus	CEE, UW	MSCE	Fall, 2019

Student Name	Department	Degree	Date
Jakob Sumearll	CEE, UW	MSCE	Spring, 2017
Sarah Wichman	CEE, UW	MSCE	Spring, 2017
Kristina Tsvetanova	CEE, UW	MSCE	Fall, 2016
Andrew Yang	CEE, UW	MSCE	Summer, 2016

RESEARCH ACTIVITIES

Total research funding:\$2,852,087Total of my amounts:\$1,614,217

Funded Research

Funding Agency	Title	My role with other PI's and co-PI's	Total Amount, my amount, (subcontracts, Matching if any)	Dates (start – finish)
NCHRP	Bearing proposal	Co-PI (PI: Stanton, UW; co-PI: Thonstad)	Total: \$600,000, My Amount: \$200,000	09/2024 – 09/2027
ERIES	Long Term Performance Assessment of Base Isolated Buildings	UW PI (PI: Haluk Sucuoglu, METU)	Total: \$220,000, My Amount: \$110,000	01/2024 – 01/2027
TECNOSTRUTTURE	Experimental Response of Full-Scale Steel-Concrete Composite beam-column joints	Sole PI	Total: \$35,000, My Amount: \$35,000	01/2023 - 06/2023
ABC-UTC	Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces	Co-PI (PI: Thonstad, UW)	Total: \$140,000, (\$70,000 UW match) My Amount: \$70,000	09/2022 - 09/2024
TECNOSTRUTTURE	Shear behavior of a novel steel-concrete composite system	Sole PI	Total: \$30,000, My Amount: \$30,000	03/2022 - 03/2023
ACI Foundation's CRC	Shear Behavior of Macro- Synthetic Fiber-Reinforced Concrete	Co-PI (PI: Thonstad, UW)	Total: \$89,500, (\$32,000 UW match) My Amount: \$30,000	09/2021 - 06/2023
PacTrans	LiDAR, Drones and BrIM for Rapid Bridge Inspection and Management	UW PI (PI: Turkan, OSU)	Total: \$300,000 (\$90,000 OSU match; \$60,000 UW match) My Amount: \$ 120,000	03/2021 - 03/2023
TECNOSTRUTTURE	Experimental Testing of a novel precast beam-to- column connection	Sole PI	Total: \$210,000, My Amount: \$210,000	03/2020 - 03/2022
NSF	RAPID/ COLLABORATIVE RESEARCH: Japan-U.S.	PI	Total: \$188,700	11/2019 -

Funding Agency	Title	My role with other PI's and co-PI's	Total Amount, my amount, (subcontracts, Matching if any)	Dates (start – finish)
	Collaboration on the Seismic Performance of Reinforced Concrete Structures	(Co-PI: Lowes, UW; Moustafa, UNR)	My Amount: \$134,080	10/2020
Mosayk	Assessment of bridges subjected to impact loads	Sole PI	Total: \$128,380, My Amount: \$128,380	09/2019 - 09/2020
TECNOSTRUTTURE	Development of a novel precast beam-to-column connection	Sole PI	Total: \$67,768, My Amount: \$67,768	01/2019 - 01/2020
ABC-UTC	Evaluation of the Shear Strength of UHPC	UW PI (Co-PI: Stanton, UW)	Total: \$110,000, My Amount: \$55,000	03/2019 - 03/2020
ACI Foundation's CRC	Shear Friction Capacity of Concrete Joints with High Strength Reinforcement	PI (Co-PI: Lehman, UW)	Total: \$87,500, (\$30,000 UW match) My Amount: \$58,750	01/2019 – 06/2020
SERA	Dynamic testing of variable friction seismic isolation devices and isolated systems	UW PI (PI: Haluk Sucuoglu, METU)	Total: \$210,000, My Amount: \$105,000	01/2018 - 01/2019
WSDOT	Seismic Evaluation and Retrofit of Hollow Precast Concrete Pile-Columns	Co-PI (PI: Stanton, UW)	Total: \$190,000, My Amount: \$95,000	04/2017 - 03/2019
RRF	Development of high-tech seismic protection devices based on sliding between variable-friction curved surfaces	Sole PI	Total: \$35,239, My Amount: \$35,239	03/2017 - 03/2018
PCI	Shear Stress Transfer across Steel to Concrete Interfaces and Effects of Dowel Action	PI (Co-PI: Stanton, UW)	Total: \$85,000, (\$50,000 UW match) My Amount: \$67,500	09/2016 - 09/2017
WSDOT	Investigation of Ultra-High Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders	Co-PI (PI: Stanton, UW)	Total: \$125,000, My Amount: \$62,500	07/2015 - 06/2017

Pending proposals

Funding Agency	Title	My role with other PI's and co-PI's	Total amount, my amount, (Subcontracts, Matching if any)	Dates (start – finish)
Janson Bridging	Performance and Cost-Benefit Analysis of Temporary Modular Bridges	Sole PI	Total: \$100,000, My Amount: \$100,000	09/2024 – 09/2027

Funding Agency	Title	My role with other PI's and co-PI's	Total amount, my amount, (Subcontracts, Matching if any)	Dates (start – finish)
RRF	Lidar-based Post-Earthquake Damage Detection in Reinforced Concrete Structures	Sole PI	Total: \$40,000, My Amount: \$40,000	09/2024 – 09/2025

DOCUMENTATION OF TEACHING EFFECTIVENESS

Courses Taught & Student Evaluations

Students rated the courses on a scale of 0-5 [0 = very poor, 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent]

Item 1, "The course content as a whole was"

Item 3, "The instructor's contribution to the course was"

Item 4, "The instructor's effectiveness in teaching the subject was"

Reported scores are adjusted medians, which have been corrected by *IASystem* to control for differences in class size, expected grade, and reason for enrollment based on regression analyses of ratings over the previous two academic years in all classes at UW.

Course	Title	Quarter	Credit Hrs	Enrol	Evals.? Response	Item 1	Item 3	Item 4	Avg. of 1-4
CEE ^{**} 220	Mech. Of Mat.	Summer 2024	4	34	Yes, 15/34	4.2	4.4	4.6	4.6
CESG ^{**} 599	Seismic Design	Summer 2024	3	13	Yes, 7/13	4.3	4.3	4.4	4.4
CEE ^{**} 220	Mech. Of Mat.	Summer 2023	4	22	Yes, 3/22	5.1	5.0	5.0	5.1
CESG ^{**} 599	Seismic Design	Summer 2023	3	17	Yes, 4/17	5.1	5.0	5.0	5.1
CESG ^{**} 502	Str. Dyn.	Winter 2023	4	21	Yes, 17/21	4.8	4.9	4.9	4.9
CESG ^{**} 599	Seismic Design	Summer 2022	3	16	Yes 9/16	4.1	4.4	4.2	4.3
CESG ^{**} 502	Str. Dyn.	Winter 2022	4	27	Yes, 6/27	5.1	5.3	5.3	5.2
CESG [*] 526	Eq. Eng. I	Spring 2021	3	24	Yes, 10/23	3.6	4.2	4.0	4.0
CESG [*] 502	Str. Dyn.	Winter 2021	4	29	Yes, 4/29	4.6	4.6	4.9	4.7
CEE [*] 452	Reif. Conc.	Fall 2021	3	38	Yes, 15/38	3.8	4.1	3.8	4.0
CESG 502	Str. Dyn.	Winter 2020	4	39	Yes, 18/39	4.8	5.0	4.8	4.9
CEE 220	Mech. Of Mat.	Fall 2019	4	69	Yes, 16/69	4.5	4.9	4.6	4.7
CESG 526	Eq. Eng. I	Spring 2019	3	38	Yes, 23/38	4.2	4.2	4.2	4.2
CESG	Str.	Winter	4	41	Yes,	4.6	4.6	4.7	4.6

Course	Title	Quarter	Credit Hrs	Enrol	Evals.? Response	Item	Item	Item	Avg.
502	Dyn.	2019	1115	•	19/41	-	5	-	<u> </u>
CEE 220	Mech. Of Mat.	Fall 2018	4	71	Yes, 40/71	4.5	4.8	4.9	4.6
CESG 526	Eq. Eng. I	Spring 2018	3	29	Yes, 18/29	4.6	4.8	4.9	4.7
CESG 502	Str. Dyn.	Winter 2018	3	30	Yes, 28/30	4.5	4.4	4.4	4.4
CEE 220 A	Mech. Of Mat.	Spring 2017	4	229	Yes, 150/229	4.2	4.4	4.3	4.3
CEE 220 B	Mech. Of Mat.	Spring 2017	4	48	Yes, 30/48	4.2	4.2	4.1	4.2
CEE 502	Str. Dyn.	Winter 2017	3	44	Yes, 32/44	4.2	4.0	4.3	4.2
CEE 502	Str. Dyn.	Winter 2016	3	43	Yes, 32/43	3.7	3.7	3.6	3.7
CEE 220	Mech. Of Mat.	Fall 2015	4	46	Yes, 22/46	3.3	3.9	3.3	3.4

*Remote teaching

**Hybrid teaching

Peer Teaching Evaluations

Course	Quarter	Reviewer		
CESG 526	Spring 2021	Richard Wiebe		
CESG 526	Spring 2020	Marc Eberhard		
CESG 526	Spring 2019	John Stanton		
CESG 526	Spring 2018	Jeffrey Berman		
CEE 220	Spring 2017	Michael Motley		
CEE 502	Winter 2016	John Stanton		

List of other teaching contributions

- FIU-ABC Webinar, November 8, 2019. "Evaluation of the Shear Strength of UHPC".
- CEE 500 Structure's Group Seminar Series Autumn 2017, Winter 2019 and Winter 2020
- CEE 500 Seminar Spring 2016. "Concepts and Technologies for Base Isolation of Buildings".
- ERASMUS MUNDUS MASTER COURSE: "Advanced Design of Reinforced Concrete Structures" (Part of: Sustainable Constructions under Natural Hazards and Catastrophic Events), December 2016, University of Liege, Belgium. (Enrollment: 17; Hours of teaching: 30).
- Course "Reinforced Concrete Structure" part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2022. (Enrollment: 9; Hours of teaching: 30).
- Course "Structural Design and Seismic Vulnerability", graduate course, Department of Architecture, Polytechnic of Milan, Italy, Academic Year 2023 2024. (Enrollment: 30; Hours of teaching: 60).

• Course "Strutture e Criteri di Progettazione Antisismica", graduate course (in Italian), Department of Architecture, Polytechnic of Milan, Italy, Academic Year 2023 - 2024. (Enrollment: 30; Hours of teaching: 60).

Other supporting documents

None

Teaching Awards, Nominations for Teaching Awards

- Teaching Assistant Award Nomination, 2013, Department of Civil and Environmental Engineering, University of Toronto
- Distinguished Teaching Award Nomination, 2019, University of Washington

SERVICE

Departmental service

- Graduate Coordinator, Structural Engineering and Mechanics group, 2021 present
- CEE Education Committee; Lead of Graduate Education sub-Committee, 2023 present
- Graduate Education Committee, 2021 2023
- Co-Graduate Advisor, Structural Engineering and Mechanics group, 2019 2021
- Valle Scholarship and Scandinavian Exchange Program Application Reviewer, 2020
- Structural Laboratory Associate Director, 2019 2022
- CEE Faculty Search Executive Committee Structures (2019)
- CEE Undergraduate Scholarship Applications Reviewer May 2019
- CEE Mentoring Committee (for Dr. Brett Maurer and Dr. Julian Yamaura), 2018 present
- Faculty Affairs Committee, 2016 2021 (chaired in 2017)
- UW EERI Student Chapter Faculty Advisor, 2016 present
- Undergraduate Admission Committee, 2016 and 2017
- Engineering Discovery Days, 2016 and 2017
- Structural Laboratory Committee, 2015 present
- Graduate Education Committee, 2015 2016

College service

• UW STARS students Faculty mentor (NSF Grant "The Redshirt in Engineering Consortium), 2016 – present

University service

None

Professional society and other service

- Organizing Committee Member 2024 EERI Annual Meeting and Seismic Design Competition
- Editorial board "Buildings" Journal 2023 present
- Session organizer. Special Session: "New Perspectives in Seismic Isolation and Energy Dissipation for Vibration Control of Structures", 18th World Conference on Earthquake Engineering, 24WCEE, Milan, Italy, June 30th to July 5th, 2024

- Session organizer. Special Session: "Shear Critical Concrete Structures Subjected to Seismic Loads: Behavior, Assessment and Retrofit", 18th World Conference on Earthquake Engineering, 24WCEE, Milan, Italy, June 30th to July 5th, 2024
- National Academic Qualification as Full Professor (Italy), February 2023
- Session organizer. Minisymposium MS25: "Towards seismic resilience: strategies and technological innovation for seismic risk reduction of existing structures", at COMPDYN2023, 9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering. Athens, Greece, June 2023
- Member of ACI "shear friction task group", subtasks "Experimental database development" and "Design model development", January 2022 present
- Member of the Committee reviewing applications for postdoctoral research fellowships in Modelling and Engineering Risk and Complexity (MERC) at Scuola Superiore Meridionale (Naples, Italy), August-September 2021
- Member of Alaska Department of Transportation Committee AKB50, Standing Committee on Seismic Design and Performance of Bridges, April 2021 present
- Panelist at Joint NHERI@UC San Diego RAPID Researcher Workshop 2020, December 2020
- Session organizer, 17th World Conference on Earthquake Engineering (17WCEE), Sendai, Japan, September 2021
- Member of ACI Committee 374, Performance-Based Seismic Design of Concrete Buildings, April 2018 present
- National Academic Qualification as Associate Professor (Italy), September 2018
- Member of ACI Chester Paul Siess Award for Excellence in Structural Research (SA03), 2017 2019
- Member of the Scientific Committee (SC) for the IABSE Symposium in Vancouver, September 2017
- Professional Engineering Licence (Italy), 2011

Community service

- Provided expert advice on the implementation of a Base Isolation System to mitigate the effects of earthquakes in a hospital in Santiago, Chile. 2024
- Base isolated hospital Santiago
- Provided expert advice on the implementation of a system of Active Mass Dampers to mitigate the dynamic effects of wind in the "Torre Piloti" currently under construction in the Port of Genoa (Italy), Design by Renzo. 2024
- Provided expert advice on the assessment of the Giuseppe Meazza "San Siro" Stadium (Milan, Italy) Activities performed: non-linear modeling and dynamic analysis of "II Anello" portion of the structure. 2023
- Member of working group investigating the collapse of the Morandi Bridge (Italy), 2018 2021.
- Provided expert advice for NAM "Scope item 30 Expert system for building 2017" and "Scope item 34 - Coordination and technical assurance of TRI / ARMOX CWG product development" (06/2017 – 06/2018).
- Provided expert advice for Studio Calvi s.r.l. (Pavia, Italy). Seismic assessment of unreinforced masonry houses in the Groningen area (09/2017 09/2018).

- Provided expert advice for Studio Calvi s.r.l. (Pavia, Italy). Seismic assessment of unreinforced masonry church inventories in the Groningen area (09/2017 09/2018).
- Member of the EERI Reconnaissance (Central Italy Earthquake, August 24, 2016).
- Provided expert advice for Eucentre Foundation (Pavia, Italy). Development of preliminary assessment tools for damaged reinforced concrete bridge structures (12/2014 - 06/2015).
- Provided expert advice for Eucentre Foundation (Pavia, Italy). Preparation of preliminary guidelines for the mitigation of the seismic vulnerability of non-structural elements in school buildings in Italy (12/2014 06/2015).

International, national or governmental service

- National Science Foundation (NSF) Panelist. Proposal reviewed: 10. 2024.
- Fonds de la Recherche Scientifique (FNRS), Belgium. Proposal Reviewer. February 2023.
- National Science Foundation (NSF) Panelist. Proposal reviewed: 23. 2018.
- Concrete Research Council (CRC) of the ACI Foundation Panelist. Proposal reviewed: 8. 2020.
- External reviewer for the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR).

All other service

None