

Tommaso D'Antino

Curriculum Vitae

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ESPERIENZA ACCADEMICA

Ottobre 2018 - presente	Ricercatore legge 240/10 – Tipo B, t.det. a tempo pieno Settore scientifico disciplinare: ICAR/09 – Tecnica delle Costruzioni Politecnico di Milano, Dipartimento di Architettura, Ingegneria delle Costruzioni e Ambiente Costruito.
Ottobre 2015 – Settembre 2018 36 mesi	Ricercatore legge 240/10 – Tipo A, t.det. a tempo pieno Settore scientifico disciplinare: ICAR/09 – Tecnica delle Costruzioni Politecnico di Milano, Dipartimento di Architettura, Ingegneria delle Costruzioni e Ambiente Costruito.
Settembre 2014 – Settembre 2015 12 mesi	Early Stage Researcher Univeristy of Patras, Department of Civil Engineering, Patras, Greece.

PUBBLICAZIONI PRINCIPALI

- **D'Antino T**, Pellegrino C, Salomoni V, Mazzucco G. (2012). Shear behavior of RC structural members strengthened with FRP materials: a 3D numerical approach, *ACI Special Publication*, (ACI SP-286), M. Lopez, and C. Carloni (Eds).
 - Pellegrino C, **D'Antino T** (2013). Experimental behaviour of existing precast prestressed reinforced concrete elements strengthened with cementitious composites, *Composites Part B: Engineering*, v 55, p 31-40. DOI: 10.1016/j.compositesb.2013.05.053.
 - **D'Antino T**, Pellegrino C (2014). Bond between FRP composites and Concrete: assessment of design procedures and analytical models, *Composites Part B: Engineering*, v 60, p 440-456. DOI: 10.1016/j.compositesb.2013.12.075.
 - Sneed LH, **D'Antino T**, Carloni C (2014) Investigation of the Bond Behavior of the PBO FRCM-Concrete Interface. *ACI Materials Journal*, v 111(1-6), 12 pp.
 - Sneed LH, **D'Antino T**, Carloni C (2014). Experimental investigation of FRCM-concrete interfacial debonding. *ACI Special Publication*, (ACI SP-298), Y.J. Kim (Eds).
 - **D'Antino T**, Carloni C, Sneed LH, Pellegrino C (2014). Matrix-fiber bond behavior in PBO FRCM composites: a fracture mechanics approach. *Engineering Fracture Mechanics*, v 117, p 94-111. DOI: 10.1016/j.engfracmech.2014.01.011.
 - Carloni C, **D'Antino T**, Sneed LH, Pellegrino C (2014). Role of the matrix layers in the stress-transfer mechanism of FRCM composites bonded to a concrete substrate. *Journal of Engineering Mechanics*, ASCE. DOI: 10.1061/(ASCE)EM.1943-7889.0000883, 2014.
 - Sneed LH, **D'Antino T**, Carloni C, Pellegrino C (2015). A comparison of the bond behavior of PBO-FRCM composites determined by single-lap and double-lap shear test. *Cement and Concrete Composites*, v 64, p 37-48.
 - **D'Antino T**, Carloni C, Sneed LH, Pellegrino C (2015). Fatigue and post-fatigue behavior of PBO FRCM-concrete joints. *International Journal of Fatigue*, v 81, p 91-104.
 - **D'Antino T**, Sneed LH, Carloni C, Pellegrino C (2015). Influence of substrate characteristics on the bond behavior of FRCM-concrete joints. *Construction and Building Materials*, v 101, p 838-850.
 - **D'Antino T**, Triantafyllou TT (2016). Accuracy of design-oriented formulations for the evaluation of flexural and shear capacities of FRP strengthened RC beams. *Structural Concrete*. doi:10.1002/suco.201500066
 - **D'Antino T**, Sneed LH, Carloni C, Pellegrino C (2016). Effect of the inherent eccentricity in single-lap direct-shear tests of PBO FRCM-concrete joints. *Composite Structures*, v 142, p 117-129.
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- **D'Antino T**, Papanicolaou C (2017). Mechanical characterization of textile reinforced inorganic-matrix composites. *Composite Part B: Engineering*, v 127, p 78-91.
 - Carozzi FG, Bellini A, **D'Antino T**, de Felice G, Focacci F, et al. (2017). Experimental investigation of tensile and bond properties of Carbon-FRCM composites for strengthening of masonry elements. *Composites Part B: Engineering*, v 128, p 100-119.
 - Focacci F, **D'Antino T**, Carloni C, Sneed LH, Pellegrino C (2017). An indirect method to calibrate the interfacial cohesive material law for FRCM-concrete joints. *Materials & Design*, v 128, p 206-217.
 - Gonzalez-Libreros J, Sneed LH, **D'Antino T**, Pellegrino C (2017). Behavior of RC beams strengthened in shear with FRP and FRCM composites. *Engineering Structures*, v 150, p 830-842.
 - **D'Antino T**, Pisani MA (2017). Evaluation of the effectiveness of current guidelines in determining the strength of RC beams retrofitted by means of NSM reinforcement. *Composite Structures*, v 167, p 166-177.
 - Carloni C, **D'Antino T**, Sneed LH, Pellegrino C (2018). Three-dimensional numerical modeling of single-lap direct shear tests of FRCM-concrete joints using a cohesive damaged contact approach. *Journal of Composites for Construction*, v 22(1), p 1-10.
 - **D'Antino T**, Pisani MA, Poggi C (2018). Effect of the environment on the performance of GFRP reinforcing bars. *Composites Part B: Engineering*, v 141, p 123-136.
 - **D'Antino T**, Colombi P, Carloni C, Sneed LH (2018). Estimation of a matrix-fiber interface cohesive material law in FRCM-concrete joints. *Composites Structures*, v 193, p 103-112.
 - **D'Antino T**, Papanicolaou C (2018). Comparison between different tensile test set-ups for the mechanical characterization of inorganic-matrix composites. *Construction and Building Materials*, V 171, p 140-151.
 - **D'Antino T**, Carozzi FG, Colombi P, Poggi C (2018). Out-of-plane maximum resisting bending moment of masonry walls strengthened with FRCM composites. *Composite Structures*. DOI: 10.1016/j.compstruct.2018.04.054
 - Bocciarelli M, Colombi P, **D'Antino T**, Fava G (2018). Intermediate crack induced debonding in steel beams reinforced with CFRP plates under fatigue loading. *Engineering Structures*. DOI: 10.1016/j.engstruct.2018.04.002
 - Mazzucco G, **D'Antino T**, Pellegrino C, Salomoni V (2018). Three-dimensional finite element modeling of inorganic-matrix composite materials using a mesoscale approach. *Composites Part B: Engineering*, v 143, p 75-85. doi: 10.1016/j.compositesb.2017.12.057
 - **D'Antino T**, Pisani MA (2018). Influence of sustained stress on the durability of glass FRP reinforcing bars. *Construction and Building Materials*, V 187, p 474-486.
 - Colombi P, **D'Antino T** (2019). Analytical assessment of the stress-transfer mechanism in FRCM composites. *Composite Structures*, v 220, p. 961-970. doi: 10.1016/j.compstruct.2019.03.074
 - Calabrese AS, Colombi P, **D'Antino T** (2019). Analytical solution of the bond behavior of FRCM composites using a rigid-softening cohesive material law. *Composites Part B: Engineering*, v 174, p 1-10.
 - **D'Antino T**, Carozzi FG, Poggi C (2019). Diagonal shear behavior of historic walls strengthened with composite reinforced mortar (CRM). *Materials and Structures*, v 51(114), p 1-15.
 - **D'Antino T**, Pisani MA (2019). Long-term behavior of GFRP reinforcing bars. *Composites Structures*, 227, p 1-10.
 - Zou X, Sneed LH, **D'Antino T**, Carloni C (2019). Analytical bond-slip model for fiber-reinforced cementitious matrix-concrete joints based on strain measurements. *Journal of Materials in Civil Engineering*, v 31(11), p 1-11.
 - **D'Antino T**, Focacci F, Sneed LH, Pellegrino C (2020). Shear strength model for RC beams with U-wrapped FRCM composites. *Journal of Composites for Construction*, v 24(1), p 1-12.
 - Calabrese AS, **D'Antino T**, Colombi P, Poggi C (2020). Study of the influence of interface normal stresses on the bond behavior of FRCM composites using direct shear and modified beam tests. *Construction and Building Materials*, v 262, p 1-13.
 - Al-Lami K, Colombi P, **D'Antino T** (2020). Influence of hygrothermal ageing on the fracture energy and mechanical properties of CFRP-concrete joints and their components. *Composite Structures*, v 238, p 1-13.
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- **D’Antino T**, Focacci F, Sneed LH, Carloni C (2020). Relationship between the effective strain of FRCM-strengthened RC beams and the debonding strain of direct shear tests. *Engineering Structures*, v 216, p 1-16.
 - **D’Antino T**, Santandrea M, Carloni C (2020). Advances in knowledge of the fracture properties of cohesive materials: fired- clay and tuff bricks. *Journal of Engineering Mechanics*, v 146(8), 04020079-1-11.
 - **D’Antino T**, Pisani MA (2020). A general analytical model for the bond capacity of NSM-concrete joints. *Journal of Composites for Construction*, v 24(6), 04020065-1-13.
 - De Felice G, **D’Antino T**, De Santis S, Meriggi P, Roscini F (2020). Lessons learned on the tensile and bond behaviour of fabric reinforced cementitious matrix (FRCM) composites, *Frontiers in Built Environment*, vol 6(5), p 1-15.
 - Zou X, Sneed LH, **D’Antino T** (2020). Full-range behavior of fiber reinforced cementitious matrix (FRCM)-concrete joints using a trilinear bond-slip relationship, *Composite Structures*, v 239, p 1-14.
 - Focacci F, **D’Antino T**, Carloni C (2020). The role of the fiber–matrix interfacial properties on the tensile behavior of FRCM coupons. *Construction and Building Materials*, v 265, p 1-13.
 - Baietti G, **D’Antino T**, Carloni C (2020). Some key aspects in the mechanics of stress transfer between SRG and masonry. *Applied Sciences*, v 10(20), p 1-15.
 - **D’Antino T**, Calabrese AS, Poggi C (2020). Experimental procedures for the mechanical characterization of composite reinforced mortar (CRM) systems for retrofitting of masonry structures. *Materials and Structures*, v 53(4), p 1-18.
 - Calabrese AS, **D’Antino T**, Colombi P, Carloni C, Poggi C (2020). Fatigue behavior of PBO FRCM composite applied to concrete substrate. *Materials*, v 13(10), p 1-15.
 - Al-Lami K, **D’Antino T**, Colombi P (2020). Durability of fabric-reinforced cementitious matrix (FRCM) composites: A review. *Applied Sciences*, v 10(5), p 1-23.
 - Calabrese AS, **D’Antino T**, Colombi P, Poggi C, Carloni C (2020). Influence of the test set-up on the bond behavior of FRCM composites. *ACI Special Publication*, v 345, p 185-195, B. Benmokrane (Eds).
 - Calabrese AS, **D’Antino T**, Colombi P (2021). Experimental and analytical investigation of PBO FRCM-concrete bond behavior using direct and indirect test set-ups. *Composite Structures*, v 267, p 1-12.
 - Al-Lami K, **D’Antino T**, Colombi P (2021). Study on the bond capacity of the FRCM- and SRG-masonry joints. *CivilEng*, v 2(1), p 68-86.
 - Nepomuceno E, Sena-Cruz J, Correia L, **D’Antino T** (2021). Review on the bond behavior and durability of FRP bars to concrete. *Construction and Building Materials*, v 287, p 1-14.
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APPARTENENZA A COMITATI DI RICERCA

Settembre 2011 – **Rilem member**
presente

Settembre 2011 – **Rilem Technical Committee 234-DUC** “Design Procedures for the use of Composites in Strengthening of RC Structures”, Chair: Prof. Carlo Pellegrino, Secretary: Prof. José Sena-Cruz.
Marzo 2015

Gennaio 2013 – TUD COST Action TU1207 “Next Generation Design Guidelines for Composites in Construction”, Chair: Prof. Maurizio Guadagnini.
Dicembre 2017

Settembre 2014 – *fib* Task Group 5.1 (formerly 9.3) “FRP Reinforcement for Concrete Structures”, Presente
Chair: Prof. Stijn Matthys, Secretary: Prof. Maurizio Guadagnini.

Settembre 2014 – European Network for Durable Reinforcement and Rehabilitation Solutions (ENDURE), Chair: Prof. Maurizio Guadagnini.
Dicembre 2017

Ottobre 2014 – **Rilem Technical Committee 250-CSM** “Composite for sustainable strengthening of masonry”, Chair: Prof. Gianmarco De Felice, Secretary: Prof. Daniel Oliveira.
Ottobre 2018

- Ottobre 2015 – Consorzio della Rete dei Laboratori Universitari di Ingegneria Sismica (ReLUIIS-DPC 2014-2018). PR 5 – “Materiali innovativi per interventi su costruzioni esistenti”, Chairs: Prof. Marco Savoia, Prof. Luciano Feo.
Presente
- Febbraio 2017 – ACI Committee 549-0L and 549-0L Liaison “Thin Reinforced Cementitious Products and Ferrocement”, Chair: Prof. Gianmarco De Felice, Secretary: Prof. Christian Carloni.
Presente
- Maggio 2018 – Study group for the CNR Italian Guidelines for design of FRCM structural applications, Chair: Prof. Luigi Ascione.
Presente
- Giugno 2019 – **Rilem Technical Committee IMC** “Durability of Inorganic Matrix Composites used for Strengthening of Masonry Constructions”, Chair: Prof. Antonietta Aiello, Deputy Chair: Prof. Catherine Papanicolaou.
Presente
- Dicembre 2019 – **Rilem Technical Committee MCC** “Mechanical Characterization and Structural design of Textile Reinforced Concrete”, Chair: Prof. Barzin Mobasher, Deputy Chair: Dr. Flávio De Andrade Silva
Presente
-

PARTECIPAZIONE A COMITATI NORMATIVI

- Luglio 2019 - ASTM International - Committee C09 on Concrete and Concrete Aggregates
Presente
-

APPARTENENZA A COMITATI EDITORIALI

- Maggio 2018 - Membro dell’Editorial Board del Journal of Composites for Construction, ASCE
Presente <https://ascelibrary.org/page/jccof2/editorialboard>
- Settembre 2018 - Membro dell’ Editorial Advisory Board of Structural Concrete, Journal of the fib
Presente https://onlinelibrary.wiley.com/page/journal/17517648/homepage/2084_edbd.html
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