CURRICULUM VITAE

26 maggio 2023

FORMATO EUROPEO PER IL CURRICULUM VITAE

INFORMAZIONI PERSONALI

Nome e Cognome	Davide Noè Gorini
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ISTRUZIONE E FORMAZIONE

• Date	Nov 2015 – Nov 2018
• Nome dell'istituto di istruzione o formazione	Sapienza Università di Roma
• Qualifica conseguita	PhD

INSEGNAMENTO

• Date	dal 2022 a oggi
• Nome dell'istituto	Corso di laura in Ingegneria Ambientale
• Tipo di azienda o settore	Sapienza Università di Roma
• Mansione	Assistente del corso *Modelli e indagini geotecniche*
• Date	dal 2018 a oggi
• Nome dell'istituto	Corso di laura in Ingegneria Civile
• Tipo di azienda o settore	Sapienza Università di Roma
• Mansione	Assistente del corso *Geotecnica sismica*
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• Nome dell'istituto	Corso di laura in Ingegneria Civile
• Tipo di azienda o settore	Sapienza Università di Roma
• Mansione	Assistente del corso *Meccanica delle terre*
• Date	2020 – 2021
• Nome dell'istituto	Corso di laura in Ingegneria Sostenibile
• Tipo di azienda o settore	Sapienza Università di Roma
• Mansione	Titolare del corso *Geotecnica*

MADRELINGUA Italiano

ALTRE LINGUE

Inglese

• Capacità di lettura ECCELLENTE
• Capacità di scrittura ECCELLENTE
• Capacità di espressione orale BUONO

PUBBLICAZIONI

TESI E RELAZIONI TECNICHE

B1. Franchin, P., Baltzopoulos, G., Biondini, F., Callisto, L., Capacci, L., Cardone, D., Dall'Asta, A., Flora, A., **Gorini, D.N.**, Iervolino, I., Marchi, A., Micozzi, F., Noto, F., Perrone, G., Scozzese, F. (2023): *Final report on the seismic reliability of Italian code-conforming bridges*, Final Report, Reluis research project DPC 2019-2021

B2. **Gorini, D.N.** (2019): *Soil-structure interaction for bridge abutments: two complementary macro-elements*, PhD thesis, Sapienza University of Rome, Italy, https://iris.uniroma1.it/handle/11573/1260972

ARTICOLI SU RIVISTA

J1. Potini, F., **Gorini, D.N.**, and Conti, R. (2023): *Rigorous lower and upper bounds for the generalized failure loads of pile groups*. Geotechnique Letters, 13(2):1-21, doi: 10.1680/jgele.22.00138.

J2. **Gorini, D.N.**, Callisto, L., Whittle A.J., and Sessa, S. (2023): *A multiaxial inertial macroelement for bridge abutments*, International Journal for Numerical and Analytical Methods in Geomechanics, Vol. 47, pp. 793-816, doi: 10.1002/nag.3493.

J3. **Gorini, D.N.** and Callisto, L. (2023): *A multiaxial inertial macroelement for deep foundations*, Computers and Geotechnics, Vol. 155, doi: https://doi.org/10.1016/j.compgeo.2022.105222.

J4. Marchi, A., Gallese, D., **Gorini, D.N.**, Franchin, P., and Callisto, L. (2022): *On the seismic performance of integral abutment bridges: from advanced numerical modelling to a practice-oriented analysis method*, Earthquake Engineering and Structural Dynamics. DOI: 10.1002/eqe.3755

J5. **Gorini, D.N.** and Chisari, C. (2022): *Impact of soil-structure interaction on the effectiveness of Tuned Mass Dampers*, Earthquake Engineering & Structural Dynamics, Vol. 51(6), pp. 1501-1521, doi: 10.1002/eqe.3625

J6. **Gorini, D.N.** and Callisto, L. (2022): *Generalised ultimate loads for pile groups*, Acta Geotechnica, Vol. 17, pp. 2495-2516, doi: https://doi.org/10.1007/s11440-021-01386-4

J7. **Gorini, D.N.**, Callisto, L. and Whittle A.J. (2022): *An inertial macroelement for bridge abutments*, Geotechnique, Vol. 72(3), pp. 247-259, DOI: https://doi.org/10.1680/jgeot.19.P.397

J8. **Gorini, D.N.**, Callisto, L. and Whittle A.J. (2021): *Dominant responses of bridge abutments*, Soil Dynamics and Earthquake

Engineering, DOI: https://doi.org/10.1016/j.soildyn.2021.106723

J9. Callisto, L. and **Gorini, D.N.** (2020): *Seismic behaviour of a suspension bridge with dissipative foundations*, Italian Geotechnical Journal, Vol. 1/2020(1), pp. 22-37, doi.org/10.19199/2020.1.0557-1405.022

J10. **Gorini, D.N.**, Whittle A.J. and Callisto, L. (2020): *Ultimate limit states of bridge abutments*, Journal of Geotechnical and Geoenvironmental Engineering, Vol. 146(7), DOI: 10.1061/(ASCE)GT.1943-5606.0002283

J11. **Gorini, D.N.** and Callisto, L. (2020): *A macro-element approach to analyse bridge abutments accounting for the dynamic behaviour of the superstructure*, Geotechnique, Vol. 70(8), pp. 711-719, DOI: 10.1680/jgeot.19.ti.012

J12. **Gorini, D.N.** and Callisto, L. (2019): *Seismic performance and design approach for friction dissipative foundations*, Soil Dynamics and Earthquake Engineering, Vol. 123, 2019, pp. 513-519, DOI: 10.1016/j.soildyn.2019.05.006

CONTRIBUTI IN VOLUME

C1. **Gorini, D.N.**, and Callisto, L. (2022): *Validazione e utilizzo di un macro-elemento termodinamico multi-assiale per spalle da ponte*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG2022, ISBN 9788897517108, Ed. Edizioni AGI, Roma, link www.iarg2022.it.

C2. Fierro, T., **Gorini, D.N.**, Castiglia, M., and Santucci de Magistris, F. (2022): *Implementazione e validazione di un modello costitutivo avanzato per le sabbie in OpenSees*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG2022, ISBN 9788897517108, Ed. Edizioni AGI, Roma, link www.iarg2022.it.

C3. **Gorini, D.N.**, and Callisto, L. (2022): *A class of thermodynamic inertial macroelements for soil-structure interaction*, In Springer Series in Geotechnical, Geological and Earthquake Engineering, proceedings of the 4th International Conference on: Performance based Design in Earthquake Geotechnical Engineering, Beijing, China, 1095-1102, doi: 10.1007/978-3-031-11898-2_87.

C4. **Gorini, D.N.**, Clarizia, G., Nastri, E., Marrazzo, P., and Montuori, R. (2022): *Assessment of the seismic performance of large mass ratio Tuned Mass Dampers in a soil-structure system*, In Springer Series in Geotechnical, Geological and Earthquake Engineering, proceedings of the 4th International Conference on: Performance based Design in Earthquake Geotechnical Engineering, Beijing, China, 747-754, doi: 10.1007/978-3-031-11898-2_48.

C5. Gallese, D., **Gorini, D.N.**, and Callisto, L. (2022): *On a novel seismic design approach for integral abutment bridges based on nonlinear static analysis*, In Springer Series in Geotechnical, Geological and Earthquake Engineering, proceedings of the 4th International Conference on: Performance based Design in Earthquake Geotechnical Engineering, Beijing, China, 730-738, doi: 10.1007/978-3-031-11898-2_46.

C6. **Gorini, D.N.**, and Callisto, L. (2022): *A thermodynamic-based macroelement approach for dynamic analysis of soil-structure systems*. In Lecture Notes in Civil Engineering, Proceedings of the 2022

Eurasian OpenSees days, Editors: Di Trapani F., Demartino C., Marano G. C., Monti G., pp. 398-407, ISSN 2366-2557, ISBN 978-3-031-30124-7, 978-3-031-30125-4 (eBook), doi: https://doi.org/10.1007/978-3-031-30125-4_36.

C7. **Gorini, D.N.**, Clarizia, G., Marrazzo, P., Montuori, R. and Nastri, E. (2022): *On the seismic protection of existing structures: a large-scale modelling of nonlinear soil-structure-TMD interaction*. In Lecture Notes in Civil Engineering, Proceedings of the 2022 Eurasian OpenSees days, Editors: Di Trapani F., Demartino C., Marano G. C., Monti G., pp. 97-106, ISSN 2366-2557, ISBN 978-3-031-30124-7, 978-3-031-30125-4 (eBook), doi: https://doi.org/10.1007/978-3-031-30125-4_9.

C8. Gallese, D., **Gorini, D.N.**, and Callisto, L. (2022): *Modelling nonlinear static analysis for soil-structure interaction problems*. In Lecture Notes in Civil Engineering, Proceedings of the 2022 Eurasian OpenSees days, Editors: Di Trapani F., Demartino C., Marano G. C., Monti G., pp. 377-387, ISSN 2366-2557, ISBN 978-3-031-30124-7, 978-3-031-30125-4 (eBook), doi: https://doi.org/10.1007/978-3-031-30125-4_34.

C9. Fierro, T., **Gorini, D.N.**, Castiglia, M. and Santucci de Magistris, F. (2022): *Implementation and use of the bounding surface plasticity geomaterial NTUASand02*. In Lecture Notes in Civil Engineering, Proceedings of the 2022 Eurasian OpenSees days, Editors: Di Trapani F., Demartino C., Marano G. C., Monti G., ISSN 2366-2557, pp. 334-343, ISBN 978-3-031-30124-7, 978-3-031-30125-4 (eBook), https://doi.org/10.1007/978-3-031-30125-4_30.

C10. **Gorini, D.N.**, and Callisto, L. (2021): *La risposta dinamica del ponte nella prestazione sismica delle spalle*, In Proceedings of the XXVII Convegno Nazionale di Geotecnica, Reggio Calabria, Italy (13-15 July 2022).

C11. Clarizia, G., **Gorini, D.N.**, Marrazzo, P., Nastri, E., and Montuori, R. (2021): *A glance at the effectiveness of large mass ratio TMDs in a coupled soil-structure system*, In the Proceedings of the 19th International Conference of numerical analysis and applied mathematics (ICNAAM 2021), Rhodes, Greece (20-26 September 2021).

C12. Gallese, D., **Gorini, D.N.**, and Callisto, L. (2021): *Effetti dell'interazione terreno-struttura sul comportamento sismico di ponti integrali a singola campata*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG2021, ISBN 9788897517153, http://www.gnig.it/IARG2021/Gallese_Domenico.pdf

C13. **Gorini, D.N.** and Callisto, L. (2020): *A coupled study of soil-abutment-superstructure interaction*, Springer Lecture Notes in Civil Engineering "Geotechnical Research for Land Protection and Development" (CNRIG2019), Vol. 40, 565-574, https://doi.org/10.1007/978-3-030-21359-6_60

C14. **Gorini, D.N.**, Callisto, L. and Whittle A.J. (2019): *Numerical evaluation of the modal characteristics of a bridge abutment*, Proceedings of the 7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019), Crete, Greece, DOI: 10.7712/120119.7050.19836

C15. **Gorini, D.N.**, Whittle., A.J. and Callisto, L. (2019): *Ultimate design capacity of bridge abutments*, Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proceedings of the 7th International Conference on Earthquake Geotechnical Engineering, (ICEGE 2019), pp. 2682-2689, Rome, Italy,

DOI: 10.1201/9780429031274

C16. **Gorini, D.N.** and Chisari, C. (2019): *Effect of soil-structure interaction on seismic performance of Tuned Mass Dampers in buildings*, Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proceedings of the 7th International Conference on Earthquake Geotechnical Engineering, (ICEGE 2019), pp. 2690-2697, Rome, Italy, DOI: 10.1201/9780429031274

C17. **Gorini, D.N.** and Callisto, L. (2016): *Predicting the dynamic response of friction dissipative foundations using a modified Newmark model*, Procedia Engineering, Vol. 158, 2016, pp. 170-175, doi: 10.1016/j.proeng.2016.08.424

ATTI DI CONFERENZE

P1. **Gorini, D.N.** (2023): *Soil inertia in the macro-response of geotechnical systems: a thermodynamic perspective*, International Symposium on Numerical Analysis of Geomaterials - Book of Extended Abstracts (NANGE 2023), Organisers: Stan Pietruszczak, Claudio Tamagnini, Kateryna Oliynyk; Assisi, Italy (10-12 May 2023), published by NANGE Committee, ISBN: 9791221033182.

P2. Lombardi, G., **Gorini, D.N.**, Manelli, A., and Callisto, L. (2023): *Un metodo semplificato per la valutazione del comportamento sismico di una galleria circolare*, XII annual meeting of joung geotechnical engineers, Padova, Italy (May 31, June 1 2023)

P3. **Gorini, D.N.** (2022): *Thinking about seismic-resistant soil-structure systems: from advanced numerical modelling to design methodologies*, 2022 SimCenter Symposium, Texas Advanced Computing Center, Texas, US (4 November 2022)

P4. Clarizia, G., **Gorini, D.N.**, Marrazzo, P., Nastri, E., and Montuori, R. (2021): *A glance at the effectiveness of large mass ratio TMDs in a coupled soil-structure system*, Proceeding of the 19th International Conference of numerical analysis and applied mathematics - ICNAAM 2021, Rhodes, Greece (20-26 September 2021)

P5. **Gorini, D.N.**, Callisto, L., Whittle A.J. and Sessa S. (2019): *An inertial macro-element of abutments for nonlinear analysis of bridges*, Proceedings of OpenSees days Eurasia 2019 - First Eurasian Conference on OpenSees, Editors Asif Usmani, Giorgio Monti and M. Anwar Orabi, ISBN 978-962-367-832-2, Hong Kong

P6. **Gorini, D.N.**, Andrew J. Whittle and Callisto, L. (2018): *Stati Limite Ultimi per spalle da ponte*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG 2018, ISBN 978-88-975170-1-6, Genova, Italy

P7. **Gorini, D.N.** and Callisto, L. (2017): *Development of equivalent structural models for the coupled analysis of the dynamic soil-structure interaction*, Proceedings of the XVII Conference ANIDIS "Earthquake Engineering in Italy", ISBN: 9788867418541, Pistoia, Italy

P8. **Gorini, D.N.** and Callisto, L. (2017): *Studio dell'interazione dinamica terreno-spalla-sovrastruttura per una spalla da ponte*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG 2017, ISBN 978-88-99432-30-0, Matera, Italy

P9. **Gorini, D.N.** and Callisto, L. (2017): *Study of the dynamic soil-abutment-superstructure interaction for a bridge abutment*,

Proceedings of the First European Conference on OpenSees, ISBN 978-972-752-221-7, Porto, Portugal

P10. **Gorini, D.N.** and Callisto, L. (2016): *Dynamic soil-structure interaction for a long-span suspension bridge with dissipative foundations*, Proceedings of the 4th International Workshop on "Dynamic Interaction of Soil and Structure (DISS_15)", pp. 289-297, ISBN: 978-88-940114-2-5, Rome, Italy

P11. **Gorini, D.N.** and Callisto, L. (2015): *Interazione dinamica terreno-struttura per le fondazioni di un ponte di grande luce*, Proceedings of the Annual Meeting of Geotechnical Researchers - IARG 2015, Cagliari, Italy