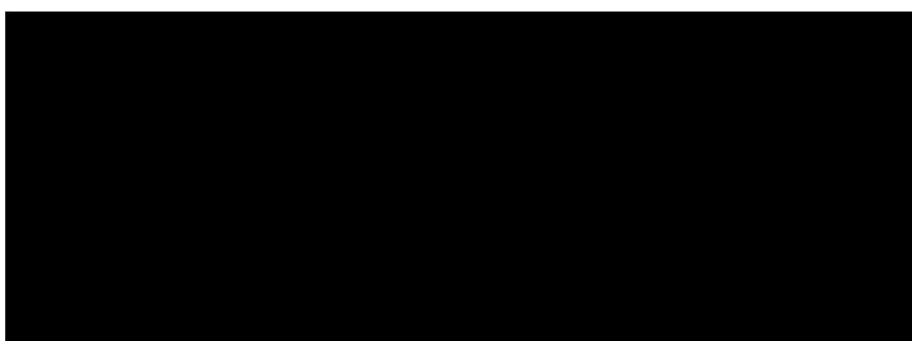
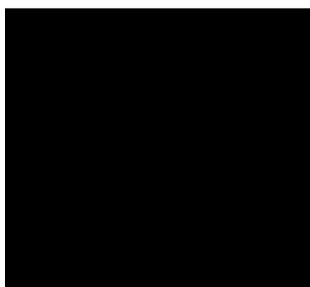


PERSONAL INFORMATION

Daria Ottonelli



WORKS EXPERIENCE

December 2021

Researcher at the Disaster Risk Assessment and Loss Data Department

CIMA Research Foundation, Via A. Magliotto, 2 17100 Savona, Italy

Main activities and responsibilities: Risk and impact analysis of natural hazard, mainly related to the characterization of the exposure (population, buildings, infrastructures, services, ...) by adopting and integrating global information with local data and vulnerability assessment. Single and multi-risk evaluation considering flood and earthquake.

Business or sector: Risk assessment, Vulnerability assessment, Exposure model, Multi-Risk evaluation

June 2021 – November 2021

Research scholarship – Title: “Support activities for seismic screening”

ReLUIIS (Network of the University Laboratories of Seismic Engineering)

At University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities: The research was aimed at assessing the seismic vulnerability of the assets used by the State Police located in the Liguria Region. In particular, the activities concerned: i) the analysis of the material available for the knowledge of the assets (drawings and reports); ii) in-situ survey; iii) the analysis of vulnerability models suitable for such structures to carry out a screening activity and definition of priority lists.

Business or sector: Structural engineering, Seismic engineering, Seismic risk analysis, Vulnerability assessment of existing buildings

June 2018 – April 2021

Post-Doc Fellow (2018: Research Program n° 21 - D.R. N. 1111 - 16.3.2018: “Seismic vulnerability assessment for national-scale risk analysis”)

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities: They were aimed at developing mechanical and empirical models for the seismic vulnerability assessment which are a useful tool at large scale mitigation policy to perform risk analyses. The development of them started from some available model, and their integrated use with reference to the existing masonry building. Non-linear analyses with more detailed models will constitute one of the validation and calibration tools of the simplified models.

Business or sector: Structural engineering, Seismic engineering, Seismic risk analysis, Vulnerability assessment of existing buildings

May 2017 – April 2018

Post-Doc Fellow (D.R. N.1111 - 8.11.2016. Won by the candidate on a call proposed directly by the University of Genoa. “Tools for a resilient society to hydrogeological, seismic, ecological, socio-political and IT risks”)

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities: They were aimed at developing a procedure for quantifying the resilience of the masonry built environment hit by an earthquake. Designing and evaluating the existing

building in terms of resilience means developing models that, in addition to satisfying the performance required by law, allow us to know the response to the event in a broader sense, evaluating direct and indirect costs and recovery times.

Business or sector: Resilience, Natural Risk, Seismic risk analysis

May 2017 – April 2018

Post-Doc Fellow (Research Program n°24 - D.R. N.9658 - 16.11.2015: “Seismic vulnerability assessment at regional scale through empirical and analytical models”)

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities: Damage and seismic vulnerability assessment of existing buildings at regional scale (both masonry and reinforced concrete existing buildings) through empirical and analytical models; Numerical modeling of masonry buildings; Seismic assessment of cultural heritage, especially historical castles, churches, towers.

Business or sector: Structural engineering, Seismic engineering, Seismic risk analysis, Vulnerability assessment of existing buildings,

May 2011 – December 2012

Research Fellow (Research Program n°38 - D.R. N. 407 - 20.5.2011: “Development of simplified mechanical model for the seismic vulnerability assessment of masonry and reinforced concrete buildings ”)

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities: Development of simplified mechanical model for the seismic vulnerability assessment of masonry and reinforced concrete buildings; Seismic assessment of complex monumental buildings: the case studies of Badia Morronese, Sulmona (AQ), and San Clemente Church, Castiglione a Casauria (PE), Italy, including surveys and analyses related to the knowledge phase of the assets and the execution of non-destructive tests; Seismic assessment and retrofitting project of the Fosdinovo (MS) Library; Vulnerability assessments of the masonry railway stations.

Business or sector: Seismic engineering, Seismic assessment and retrofitting of ordinary and historical buildings, Seismic risk analysis.

UNIVERSITY TEACHING

September 2022, 2023, 2024	Subject matter expert of the module “Seismic risk assessment and mitigation of the built environment”, in the course “Advanced risk assessment” University of Genoa - Polytechnic School, DITEN, Department of Naval, Electrical, Electronics and Telecommunications Engineering, Via Magliotto 2, 17100 Savona, Italy
March 2021 – March 2022	Contract Professor of the course “Resilience of the built environment”. University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy
September 2016 – May 2017 September 2015 – May 2016	Contract Professor of the Laboratory of Structural Engineering. University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy
March 2020 – May 2020 September 2017 – May 2018 March 2014 – May 2015 January 2012 – May 2012	Assistant Professor of the Laboratory of Structural Engineering. University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy
November 2015 – June 2016 May 2014 – December 2014 May 2013 – December 2013	Tutor for university students in the ambit of the degree course of Construction Engineering and Architecture at the University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy
March 2012 – Present	Co-supervisor for more than thirty graduation theses at the University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

EDUCATION AND TRAINING

January 2013 – April 2016

PhD in Structural Engineering. PhD thesis: "Seismic performance assessment of unreinforced masonry buildings: the loss calculation". **EQF level 8**
Supervisor: Prof. S. Lagomarsino and Prof. S. Cattari

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Main activities and responsibilities:

- As a PhD student, the main activity is to do research, mostly on my project, focused mainly on the development of method for assessing the exposure in a systematic way in the ambit of a seismic risk analysis and the quantification of performance through evaluation of the losses in monetary terms, since it is necessary to improve the resilience of our societies.
- However, a PhD student is involved in teaching, either by teaching directly, marking papers or supervising dissertation students. Other activities will include attending conferences, giving presentations and publishing scientific papers.
- Furthermore during these years I perform the post earthquake damage survey for Emilia earthquake 2012 (in particular related to the monumental buildings as fortresses and bell towers) and Canterbury earthquake, 2011 (in particular related to the churches defining a new form for the damage survey of New Zealand Churches).

Sector: Structural engineering, Seismic engineering, Seismic risk analysis, Vulnerability assessment of existing buildings, Performance based seismic assessment

July 2011

Professional Practice Exam for the Engineering Profession organized by the Engineers Association of Genoa Province (the national engineer register identification number: 9970 Section A).

September 2004 – March 2011

Master degree in Construction Engineering and Architecture. **EQF level 7**

Thesis: "Seismic vulnerability and risk assessment of reinforced concrete public buildings". Maximum score obtained: 110/110 cum laude.

Supervisors: Prof. Sergio Lagomarsino and Prof. Serena Cattari

University of Genoa - Polytechnic School, DICCA, Department of Civil, Chemical and Environmental Engineering, Via Montallegro, 1 16145 Genova, Italy

Subjects: Structural engineering, Structural Mechanics, Geotechnics, Applied Physics, Architectural Engineering and Building Types, Urban planning.

September 1999 – June 2004

Scientific high school degree. **EQF level 5**

Maximum score obtained: 100/100.

G. Parodi Liceum, 15011 Acqui Terme (AL), Italy

Subjects: Mathematics, Physics, Chemistry, Italian Literature, English, Latin, Philosophy, History.

SCIENTIFIC and PROFESSIONAL COURSES

April 2013

May 2013

October 2015

DPC (Department of Civil Protection) - RELUIS COURSE for the post-seismic damage assessment of ordinary and monumental buildings (qualifying examination on October 2015)
Department of Civil Protection headquarters in Rome; Polytechnic of Milan (Italy), Piazza Leonardo da Vinci, 32.

September 2012

LISBON IN MOTION WORKSHOP for the seismic vulnerability assessment of the area of Lisbon "Cais Do Sodré"(Portugal)

Lisbon (Portugal) - workshop organized by the 15th World Conference on Earthquake Engineering.

December 2011

MASONRY AND SEISMIC RISK: THE CASE STUDY OF L'AQUILA" WORKSHOP
L'Aquila (Italy) - workshop organized by ARCO – Associazione per il Recupero del Costruito.

October 2010

RETROFITTING OF EXISTING BUILDINGS AND SEISMIC IMPROVEMENT

Genoa (Italy) – seminar organized by CIAS – Corso Internazionale di Aggiornamento Sperimentale-Scientifico.

September 2010

MODELING AND ANALYSIS OF EXISTING MASONRY STRUCTURES

Organized by prof. S. Lagomarsino, S. Cattari, C. Calderini.

University of Genoa - Polytechnic School - DICCA, Department of Civil, Chemical and Environmental Engineering.

September 2008 – May 2009

CONSTRUCTION SITE SECURITY COURSE (qualifying examination on June 2010)

University of Genoa - Polytechnic School - DICCA, Department of Civil, chemical and Environmental Engineering.

INTERNSHIP

May 2010 – September 2010

Provincial Authority of Genoa – Seismic Office, Genoa, Italy.

Main activities:

- Application of the macroseismic vulnerability model aimed to assess the seismic risk for the public-facilities, especially referring to Province-owned and available structures. Surveys and inspections of the above-mentioned buildings.

OTHER INFORMATION

Presentations
Conferences
Seminars

Speaker at the conference:

- ANIDIS 2019 – L'INGEGNERIA SISMICA IN ITALIA, Ascoli Piceno, Italy, September 15-19, 2019. Presentation of the paper: "Analisi statistiche dei dati tipologici e di danno delle scuole in muratura danneggiate dal terremoto del Centro Italia 2016/2017", Ottonelli D., Alfano S., Cattari S., Di Ludovico M., Prota A.;
- 2ND INTERNATIONAL WORKSHOP ON MODELLING OF PHYSICAL, ECONOMIC AND SOCIAL SYSTEMS FOR RESILIENCE ASSESSMENT, Jrc Ispra (Va), Italy, December 2017. Presentation of the paper: "The seismic resilience of the built environment: the case of the masonry buildings", Lagomarsino S., Cattari S., Ottonelli D.;
- ANIDIS 2017 – L'INGEGNERIA SISMICA IN ITALIA, Pistoia, Italy, September 17-21, 2017. Presentation of the paper: "Procedura per il calcolo della perdita annuale media in edifici esistenti in muratura", Ottonelli D., Cattari S., Lagomarsino S.;
- 2nd ATC-SEI, Conference on Improving the Seismic Performance of Existing Building and Other Structures. San Francisco, US. 10 – 12 December 2015. Presentation of the paper: "Seismic Loss Assessment Procedure for Masonry Buildings", Ottonelli D., Lagomarsino S., Cattari S.;
- ANIDIS 2015 – L'INGEGNERIA SISMICA IN ITALIA, L'Aquila, September 13-17, 2015. Presentation of the paper: "Sviluppo di una nuova procedura per il rilievo del danno delle chiese nella fase di post-terremoto", Lagomarsino S., Cattari S., Ottonelli D., Giovinazzi S.;
- 2ECEES, Second European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey, August 25-29, 2014. Presentation of the paper: "Fragility curves for masonry buildings from empirical and analytical models", Cattari S., Lagomarsino S., Ottonelli D.;
- ANIDIS 2013 – L'INGEGNERIA SISMICA IN ITALIA, Padua, June 30–July 4, 2013. Presentation of the paper: "Simulazione tramite analisi lineari del danno sismico della Chiesa di Santa Maria Paganica (L'Aquila)", Cattari S., Lagomarsino S., Ottonelli D.;
- XX Exhibition of art restoration and conservation of cultural and Environmental heritage, Ferrara, March, 21, 2013. Presentation of the study: "Seismic analysis of the San Clemente a Casauria (PE) Church", Cattari S., Lagomarsino S., Ottonelli D.

Participation to the following conferences, with different papers or report:

- EGU 2024 - EUROPEAN GEOSCIENCES UNION in Vienna, Austria and online, from 14–19 April 2024. Co-author of the abstract "A mathematical framework to quantify physical damages from concurrent and consecutive hazards", De Angeli, S., Borre, A., Trasforini, E., Ottonelli, D., Boni, G., and Ghizzoni, T.
- EGU 2024 - EUROPEAN GEOSCIENCES UNION in Vienna, Austria and online, from 14–19

April 2024. Co-author of the abstract "Appraising and reducing riverine flood risk: a case study from Central Italy", Dottori, F., Darienzo, M., Fagugli, G., Gabellani, S., Ghizzoni, T., Ottonelli, D., Pignone, F., and Trasforini, E.

- EGU 2023 - EUROPEAN GEOSCIENCES UNION in Vienna, Austria and online, from 23–28 April 2023. Presentation of the online poster on the abstract "High resolution exposure model for a flood displacement risk assessment", Ottonelli D., Ponserre S., Rossi L., Rudari R., Trasforini E.
- EGU 2023 - EUROPEAN GEOSCIENCES UNION in Vienna, Austria and online, from 23–28 April 2023. Co-author of the abstract "From vulnerability to vulnerabilities for a probabilistic flood displacement risk model: the case study of Fiji and Vanuatu.", Trasforini E., Rossi L., Ponserre S., Campo L., Libertino A., Ottonelli D., Rudari R.
- EGU 2023 - EUROPEAN GEOSCIENCES UNION in Vienna, Austria and online, from 23–28 April 2023. Co-author of the abstract "Sensitivity analysis of post-event recovery stage: a new dynamic approach", Borre A., Trasforini E., Ghizzoni T., Ottonelli D.
- Internal displacement Conference, 24 October 2022, Genève
- 16TH ECEES - European Conference on Earthquake Engineering, Thessaloniki, 2018 June;
- SECED - Earthquake Risk and Engineering towards a Resilient World, Cambridge, 2015, July;
- MURICO4 - MECHANICS OF MASONRY STRUCTURES, Ravenna, 2014, September;
- 15TH WCEE - WORLD CONFERENCE IN EARTHQUAKE ENGINEERING, Lisbon, 2012, September.

Conference Paper

- Wens, M., de Moel, H., van Loon, A., Isabellon, M., Ottonelli, D., Ponserre, S., Rossi, L. (2024) "A DATA-DRIVEN APPROACH TO PREDICT WATER SECURITY AND SOCIETAL IMPACTS: THE RISK OF DROUGHT-INDUCED INTERNAL DISPLACEMENT IN THE HORN OF AFRICA", EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-19158, <https://doi.org/10.5194/egusphere-egu24-19158>, 2024.
- Dottori, F., Darienzo, M., Fagugli, G., Gabellani, S., Ghizzoni, T., Ottonelli, D., Pignone, F., Trasforini, E. (2024) "APPRAISING AND REDUCING RIVERINE FLOOD RISK: A CASE STUDY FROM CENTRAL ITALY", EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-8531, <https://doi.org/10.5194/egusphere-egu24-8531>, 2024.
- Borre, A., Trasforini, E., Ottonelli, D., Ghizzoni, T., Rudari, R. (2024) "CONSECUTIVE DISASTERS: AN APPROACH TO MULTI-HAZARD EXPOSURE, VULNERABILITY, AND RECOVERY EVALUATION AT GLOBAL SCALE", EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-17565, <https://doi.org/10.5194/egusphere-egu24-17565>, 2024.
- Molinari, D., Asaridis, P., Caporale, D., Ottonelli, D., Rubino, A. and the RETURN WP 7.2 research team (2024). "TOWARDS A MULTI-CRITERIA ANALYSIS FOR THE EVALUATION OF RISK REDUCTION STRATEGIES EFFECTIVENESS IN MULTI-HAZARD ENVIRONMENTS", EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-10316, <https://doi.org/10.5194/egusphere-egu24-10316>, 2024.
- Polese M., Tocchi G., Dolsek M., Babič A., Faravelli M., Borzi B., Rebora N., Ottonelli D., Mikos M., Quaroni D., Masi R., Prota A. (2023). "A MULTI-RISK FRAMEWORK FOR ASSESSING AND RANKING SEISMIC AND FLOOD RISKS: AN APPLICATION IN ITALY-SLOVENIA TRANSBOUNDARY REGION" Paper presented at the COMPDYN Proceedings, 2023-June
- Cattari, S., Alfano, S., Ottonelli, D., Saler, E., da Porto, F. (2021). "COMPARATIVE STUDY ON TWO ANALYTICAL MECHANICAL-BASED METHODS FOR DERIVING FRAGILITY CURVES TARGETED TO MASONRY SCHOOL BUILDINGS." Paper presented at the COMPDYN Proceedings, 2021-June
- Cattari, S., Degli Abbatì, S., Ottonelli, D., Marano, C., Camata, G., Spacone, E., da Porto, F., Modena, C., Lorenzoni, F., Magenes, G., Penna, A., Graziotti, F., Ceravolo, R., Miraglia, G., Lenticchia, E., Fiorini, N., Spina, D. (2019). "DISCUSSION ON DATA RECORDED BY THE ITALIAN STRUCTURAL SEISMIC MONITORING NETWORK ON THREE MASONRY STRUCTURES HIT BY THE 2016-2017 CENTRAL ITALY EARTHQUAKE". COMPDYN Proceedings, 1, 1889-1906.
- Degli Abbatì S., D'Altri A.M., Ottonelli D., Castellazzi G., Cattari S., de Miranda S., Lagomarsino S. (2017). "SEISMIC ASSESSMENT OF COMPLEX ASSETS THROUGH NONLINEAR STATIC ANALYSES: THE FORTRESS OF SAN FELICE SUL PANARO HIT BY THE 2012 EARTHQUAKE IN ITALY". Proc. COMPDYN 2017, Rhodes Island, Greece, 15-17 June 2017.

- Lagomarsino S., Cattari S., Ottonelli D., (2015), "SEISMIC LOSS ASSESSMENT PROCEDURE FOR MASONRY BUILDINGS"; Proc. of 2nd ATC-SEI Conference 2015. 10 – 12 Dicembre 2015, San Francisco, US.
- Lagomarsino S., Cattari S., Ottonelli D., Rossi M. (2014) "BUILDINGS BEHAVIOUR IN THE URBAN FABRIC: THE SAFETY ASSESSMENT ISSUE IN THE POST EARTHQUAKE RECONSTRUCTION PLANS", Proc. of S.M.ART. BUIL.T. Structural Monitoring of Artistic and historical Building Testimonies, 27-29 March 2014, Bari, Italy.
- Lagomarsino S., Ottonelli D., Cattari S. (2014) "AN ANALYTICAL MECHANICAL MODEL FOR THE SEISMIC ASSESSMENT OF BELL TOWERS". MURICO4, 9-11 September 2014, Ravenna, Italy.
- Carocci C.F., Borgia C., Costa M., Circo C., Indelicato D., Marino M., Lagomarsino S., Cattari S., Cianci F., Dal Bò A., Degli Abbati S., Ottonelli D., Romano C., Rossi M., Serafino N., Stagno G., Cifani G., Martinelli A., Castellucci A., Lemme A., Liris M., Martegiani F., Mazzariello A., Milano L., Morisi C., Petracca D., Tocci C., Pittaluga D., Vecchiattini R., UNA METODOLOGIA PER LA CONSERVAZIONE DI CENTRI STORICI DANNEGGIATI DAL SISMA: RILIEVO COSTRUTTIVO, INDAGINI ED INDICAZIONI PER IL RECUPERO DI CASENTINO (AQ); Atti del convegno "Sicurezza e conservazione nel recupero dei beni culturali colpiti da sisma", 8-9 aprile 2010, Venezia.
- Cattari S., Lagomarsino S., Ottonelli, D., (2012), MECHANICAL MODELS FOR THE VULNERABILITY ASSESSMENT OF EXISTING REINFORCED CONCRETE BUILDINGS, Proc. of 15th World Conf. on Earth. Eng., 24-28 September 2012, Lisbon.
- Cattari S., Ottonelli, D., (2012), A METHODOLOGY FOR THE SEISMIC RISK MITIGATION BASED ON MECHANICAL MODELS: THE CASE OF REINFORCED CONCRETE SCHOOLS IN GENOA (ITALY), Proc. of 15th World Conf. on Earth. Eng., 24-28 September 2012, Lisbon.
- Raineri E., Marchini G., Balbi A., Resemini S., Ottonelli, D., (2012), THE SAFETY VERIFICATION PLAN IN GENOA PROVINCE (ITALY): SEISMIC ASSESSMENT OF PUBLIC BUILDINGS IN A LOW SEISMICITY AREA, Proc. of 15th World Conf. on Earth. Eng., 24-28 September 2012, Lisbon.
- Cattari S., Lagomarsino S., Ottonelli D. (2013), "SIMULAZIONE TRAMITE ANALISI LINEARI DEL DANNO SISMICO DELLA CHIESA DI SANTA MARIA PAGANICA (L'AQUILA)"; Proc. of Anidis 2013, l'Ingegneria Sismica in Italia. 30 Giugno - 4 Luglio 2013, Padova.
- Cattari S., Degli Abbati S., Ottonelli D., Lagomarsino S. (2014) "SEISMIC ASSESSMENT OF COMPLEX CULTURAL HERITAGE: THE CASE STUDY OF THE BADIA MORRONESE (AQ, ITALY)". Proc. of PROHITECH'14, 2nd International Conference on Protection of Historical Constructions, 7-8 May 2014, Antalya, Turkey.
- Cattari S., Lagomarsino S., Ottonelli D., (2014) "FRAGILITY CURVES FOR MASONRY BUILDINGS FROM EMPIRICAL AND ANALYTICAL MODELS". Proc. of. 2ECEE, European Conference On Earthquake Engineering and Seismology, 24-29 August 2014, Istanbul, Turkey.
- Cattari S., Degli Abbati S., Ottonelli D., Lagomarsino S. (2014) "SEISMIC ASSESSMENT OF COMPLEX MONUMENTAL BUILDINGS IN AGGREGATE: THE CASE STUDY OF PALAZZO DEL PODESTÀ IN MANTUA (ITALY)". Proc. of SACH 2014 - 9th international conference on Structural Analysis of Historical Construction, 14-17 October 2014, Mexico City, Mexico.
- Cattari S., Ottonelli D., Pinna M., Lagomarsino S., Clark W., Giovinazzi S., Ingham J.M., Marotta A., Liberatore D., Sorrentino L., Leite J., Lourenco P.B., Goded T., (2015). "PRELIMINARY RESULTS FROM DAMAGE AND VULNERABILITY ANALYSIS OF URM CHURCHES AFTER THE CANTERBURY EARTHQUAKE SEQUENCE 2010-2011". Proc. of 2015 NZSEE Conference - New Zealand Society for Earthquake Engineering Technical Conference, 10 – 12 April 2015 Rotorua, New Zealand.
- Cattari S., Ottonelli D., Pinna M., Lagomarsino S., Clark W., Giovinazzi S., Ingham J.M., Marotta A., Liberatore D., Sorrentino L., Leite J., Lourenco P.B., Goded T., (2015). "DAMAGE AND VULNERABILITY ANALYSIS OF URM CHURCHES AFTER THE CANTERBURY EARTHQUAKE SEQUENCE 2010-2011". Proc. of SECED 2015 Conference - Earthquake Risk and Engineering towards a Resilient World, 9-10 Luglio 2015, Cambridge, UK.
- Lagomarsino S., Cattari S., Ottonelli D., Giovinazzi S., (2015), "SVILUPPO DI UNA NUOVA PROCEDURA PER IL RILIEVO DEL DANNO DELLE CHIESE NELLA FASE DI POST-TERREMOTO"; Proc. of Anidis 2015, l'Ingegneria Sismica in Italia. 13 – 17 Settembre 2015, L'Aquila.
- Ottonelli D., Cattari S., Lagomarsino S. (2016), "LOSS ASSESSMENT PROCEDURE OF UNREINFORCED MASONRY BUILDINGS"; Proc. of 16th World Conf. on Earth. Eng., 9-13

January 2017, Santiago de Chile, Chile.

- Ottonelli D., Cattari S., Lagomarsino S. (2017), "THE SEISMIC RESILIENCE OF THE BUILT ENVIRONMENT: THE CASE OF THE MASONRY BUILDINGS"; Proc. of 2nd International Workshop on modelling of physical, economic and social systems for resilience assessment, JRC Ispra (Va), Italy.
 - Ottonelli D., Cattari S., Lagomarsino S., (2017) "PROCEDURA PER IL CALCOLO DELLA PERDITA ANNUALE MEDIA IN EDIFICI ESISTENTI IN MURATURA". ANIDIS 2017, 17-21 Settembre 2017, Pistoia, Italy.
 - Cattari S., Sivori D., Ottonelli D., Degli Abbati S., Spina D., Acunzo G., Fiorini N., Ferretti G., De Ferrari R., (2017) "AFFIDABILITÀ DELLA PROCEDURA SMAV PER EDIFICI IN MURATURA: APPLICAZIONE AL MUNICIPIO DI SANREMO". ANIDIS 2017, 17-21 Settembre 2017, Pistoia, Italy.
 - Ottonelli D., Alfano S., Cattari S., Di Ludovico M., Prota A., (2019) "ANALISI STATISTICHE DEI DATI TIPOLOGICI E DI DANNO DELLE SCUOLE IN MURATURA DANNEGGIATE DAL TERREMOTO DEL CENTRO ITALIA 2016/2017". ANIDIS 2019, 15-19 Settembre 2019, Ascoli Piceno, Italy.
 - Cattari S., Ottonelli D., Degli Abbati S., Magenes G., Manzini C.F., Morandi P., Spacone E., Camata G., Marano C., Calì I., Pantò B., Cannizzaro F., Occhipinti G., Calderoni B., Cordasco E.A., de Miranda S., Castellazzi G., D'Altri A.M., Saetta A., Talledo D., Berto L., (2019) "USO DEI CODICI DI CALCOLO PER L'ANALISI SISMICA NONLINEARE DI EDIFICI IN MURATURA: CONFRONTO DEI RISULTATI OTTENUTI CON DIVERSI SOFTWARE SU UN CASO STUDIO REALE". ANIDIS 2019, 15-19 Settembre 2019, Ascoli Piceno, Italy.
 - Degli Abbati S., Cattari S., Lagomarsino S., Ottonelli D. (2020), "SEISMIC ASSESSMENT AND STRENGTHENING INTERVENTIONS OF ATOP SINGLE-BLOCK ROCKING ELEMENTS IN MONUMENTAL BUILDINGS: THE CASE STUDY OF THE SAN FELICE SUL PANARO FORTRESS"; 12th International Conference on Structural Analysis of Historical Constructions SAHC 2020, 16-18 September 2020, Barcelona, Spain.
 - Cattari S., Ottonelli D., Franco F., Guardiani A., Buschiazzo T. (2020), "TOWARDS AN IMPROVED URBAN SEISMIC RESILIENCE: THE PILOT CASE STUDY OF SANREMO MUNICIPALITY"; Proc. of 17th World Conf. on Earth. Eng., 13-18 September 2020, Sendai, Japan.
- Journal Paper
- Meiler, S., Mühlhofer, E., Lüthi, S., Bresch, D. N., Ottonelli, D., Ghizzoni, T., Trasforini, E., Rudari, R., Rossi, L., Kasmalkar, I., Mohammadianab, N., Daou, D., Nguyen, T.-L., Gyawali, D. R., Peter, M., Oakes, R., Souvignet, M., Ponserre, S. (2025). "A NATURAL HAZARD RISK MODELLING APPROACH TO HUMAN DISPLACEMENT - FRONTIERS & CHALLENGES." Environmental Research: Climate, 4(4). <https://doi.org/10.1088/2752-5295/ae014c>
 - Borre, A., Ghizzoni, T., Trasforini, E., Ottonelli, D., Rudari, R., Ferraris, L. (2025). "DEVELOPING THE RECOVERY GAP INDEX: A COMPREHENSIVE TOOL FOR ASSESSING NATIONAL DISASTER RECOVERY CAPACITIES." Sustainability, 17(3). <https://doi.org/10.3390/su17031044>
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Book Chapter

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International Experience

In February 2014 a research stay of one month in New Zealand at the University of Canterbury collaborating with Dr. Sonia Giovinazzi, research fellow in Risk Management Department of Civil and Natural Resources Engineering.

The cooperation started within the following two projects "Vulnerability analysis of unreinforced masonry

churches" and "Projecting Damage and Losses for Building and Infrastructure from the Canterbury Earthquake Sequence".

National and International Project

CIMA Research Foundation: as member of the Risk assessment and Loss Data Department, I participate to the following project:

- BORIS2 (2024-2025): Funded by DG ECHO, the project (Cross BOrder RISk assessment for increased prevention and preparedness in Europe: way forward) aims to develop a methodology for multi-risk assessment, focusing on seismic and flood risks at an urban scale, intended for emergency management. This methodology is applied in three pilot sites at the borders of Italy-Slovenia and Austria-Slovenia, and in Montenegro;
- Multi-Criteria and Cost-Benefit Analyses for the measures adopted in the Flood Risk Management Plan developed by the Northern Apennines River Basin District Authority;
- IPA CARE Project (2023): it is aimed to contribute to increased resilience in Western Balkans region and Turkey to in particular earthquakes and health emergencies. In this Project CIMA was involved in the inception phase to introduce a multi-hazard environment in the risk assessment evaluation;
- Flood risk assessment in the Marche and Umbria Region (2023-2024): definition of the exposure and vulnerability models of the built-up and agricultural areas validated with the observed damage for the evaluation of the risk profile;
- RETURN - multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate(2023-2025): aims to the improvement of the entire disaster risk management cycle through the application of new methodologies and strategies for monitoring, assessment, forecasting, prevention and mitigation of natural events, acting specifically to improve resilience, as well as adopting a holistic, interdisciplinary and problem-solving approach. I am involved in a cross-cutting Spoke TS (TS3 – Communities' resilience to risks: social, economic, legal and cultural dimensions), in particular in the WP aims at defining national guidelines and tools for the evaluation of the effectiveness of alternatives of intervention in natural risks management, by considering in detail Multi Criteria Analysis (MCA) tools. In the WP, I am task responsible of Task 2.1 "State of art on MCA applied to natural risk management";
- BORIS (2022-2023): Development of a shared methodology for the management of cross-border seismic and flood risk of the Italian-Slovenian-Austrian borders. The assessment is performed for single and multi-risk, which will allow to assess the expected consequences for individual natural hazards and the comparison and classification of multi-risk impacts in transboundary regions. I am mainly involved in the construction of the exposure model, adopting global and local data, and the vulnerability evaluation;
- IDMC (International Displacement Monitoring Centre) - CIMA Research Agreement (2021-2022): Aim of the project is the assessment of the Flood-induced Population Displacement Risk in two different case studies: Fiji and Vanuatu, in the Pacific Ocean, and Sudan Somalia and Ethiopia in the Horn of Africa. My activity has been mainly based on the definition of the exposure to support the physical vulnerability components, that considers factors often omitted in standard risk models, such as direct impacts on houses and livelihoods, and indirect impacts on critical facilities and services.

University of Genoa: as member of the research group coordinated by Prof. S. Lagomarsino and Prof. S. Cattari I have been involved in the following projects:

- RELUIS (Network of the University Laboratories of Seismic Engineering) – DPC (Civil Protection Department) Project (from 2014 to 2021)
 - WP2: Inventory of existing structural and building types - CARTIS (Coordinated by Prof. G. Zuccaro). Main activity: adoption of the CARTIS survey form to identify the recurring construction features in the different building types at regional scale;
 - WP4: Risk Maps and Seismic Damage Scenarios - MARS (Coordinated by Prof. S. Lagomarsino and Prof. A. Masi). Main activity: seismic vulnerability analysis on residential school buildings through empirical approaches (thanks to the re-processing of damage data from past earthquakes from 1976 to today) and analytical approaches for the construction of fragility curves;
 - WP5: Seismic strengthening and energy upgrading of existing buildings (Coordinated by Prof. F. da Porto and Prof. A. Prota). Main activity: analysis of an existing load-bearing masonry building strengthened with intervention techniques at an increasing level of complexity and cost and integrated from the seismic and energy point of view;
 - WP10 "Code contributions relating to existing masonry structures" (Coordinated by G. Magenes). Main activity: comparison of the results of non-linear static analyses

performed with different software based on the Equivalent Frame (EF) modelling approach on a simple two-story unreinforced masonry building with rigid diaphragms.

- RELUIS–DPC Project (2014-2018)
 - Masonry structures (Coordinators: Proff. S. Lagomarsino, G. Magenes and C. Modena). Main activities and responsibilities: the evaluation of the seismic demand for local mechanisms (mainly referring to those located at the top of building) in order to properly account for the filtering effect of the main structure; the validation of the displacement-based procedures at present available in literature and codes for the seismic verification.
 - Displacement based approach: Seismic loss estimation in pre- and post-strengthening condition (Coordinators: Proff. G.M. Calvi, T. Sullivan, R. Monteiro). Main activities and responsibilities: Development of simplified procedure for the seismic loss assessment in monetary terms for masonry buildings.
 - Vulnerability assessment at territorial scale (Coordinators: Proff. M. Dolce, G. Zuccaro): Main activities and responsibilities: Development of a systematic methodology for the assessment of exposure at regional scale based on the structural and typological characteristics of ordinary buildings (CARTIS); definition of a database containing the abovementioned information about the ordinary buildings.
- Research agreement 2018 between the Municipality of Sanremo and the University of Genoa, Department of Civil, Chemical and Environmental Engineering (DICCA) for the Seismic microzonation studies and vulnerability analysis of the village of Bussana Vecchia in the municipality of Sanremo, aimed to definition of recovery interventions for public use of the same (2018). Main activities and responsibilities: Analysis of the consistency of Bussana; definition of extremely urgent interventions to restore safety conditions, especially relating to the activation of possible out-of-plane mechanisms of walls.
- Research agreement 2016 for the seismic assessment and strengthening of the fortress of San Felice sul Panaro (Italy) after the Emilia Earthquake, 2012. Main activities and responsibilities: This project deals with the seismic assessment of the monumental building of the Fortress of San Felice sul Panaro and the definition of proper strengthening interventions.
- Research agreement 2013 for the seismic assessment of the fortress of the Palazzo del Podestà in Mantua (Italy) after the Emilia Earthquake, 2012. This project focused on the seismic assessment of the complex monumental building of the Palazzo del Podestà in Mantua. A procedure was developed to perform the seismic verification of structures in aggregate like the examined one.
- CIPE AGREEMENT – Progetto Sisma Abruzzo 2012. Main activities and responsibilities: This project allowed to develop: damage assessment and survey of two monumental buildings hit by the L'Aquila earthquake, 2009 (Badia Morronese in Sulmona - AQ and church of San Clemente in Casauria – PE).
- PERPETUATE Project “PERformance-based aPproach to Earthquake proTection of cUltural heriTage in European and mediterranean countries “ (2009 -2012; FP7- ENV.2009.3.2.1.1; www.perpetuate.eu). Main activities and responsibilities: application of the PERPETUATE proposed procedure, from the knowledge phases to the seismic analyses, to some cases study of the project belonging to cultural heritage. Development of the software for verification of local mechanisms MB_PERPETUATE, following an analysis approach linear and nonlinear kinematic, together with Prof. S. Lagomarsino.

Honours and awards

Winner of “Premio Piranesi Yourcenar” organized by Accademia Adrianea di Archeologia e Architettura, September 2007.

PERSONAL SKILLS

Mother tongue Italian

Other language

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	

English

B1

B1

B1

B1

B1

Oxford PET (Preliminary English Test)

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

Good communication skills gained through my experience as interviewer during the "Genoa International Boat Show" in the October 2008 and 2009.

Organizational / managerial skills

I have good ability to work in a team, thanks to the many educational workshops done during the years of the University (due to the group works in the fields of architectural, structural design and urban planning).

During the first years of Ph.D. I have acquired a good organizational skill, since during this period there are several moments of study and work that must be integrated.

Computer skills

Good command of Microsoft Office™ tools (Excel, Word, PowerPoint)

Good command of photo editing and graphics design (Adobe Illustrator, Adobe Photoshop)

Good command of design and architectural modeling software Autocad and Rhinoceros;

Good command of MATLAB (Matrix Laboratory);

Good command of MSR rollei (aimed to);

Good command of structural analysis software SAP 2000, ANSYS and Tremuri (for masonry structures)

Good command of the GIS software GRASS (Geographic Resources Analysis Support System)

Driving licence

B

Genova, 28/10/2025

In fede,

Daria Ottonelli