

The 11th International Conference on the  
**BEHAVIOUR OF STEEL STRUCTURES IN SEISMIC AREAS**

# CONFERENCE AGENDA

# CHAIRS



Prof. Federico M. Mazzolani  
Chairman



Prof. Vincenzo Piluso  
Co-chairman

## Organised by:



# CONFERENCE PRESENTATION

The STESSA Local Organizing Committee extends a warm welcome to all participants attending the eleventh edition of the STESSA Conference. This specialized event stands as the world's premier gathering dedicated exclusively to seismic-resistant steel structures. Researchers, academics, and engineers from across the globe converge here to explore the latest advancements in steel structure behavior, design, assessment, testing, and practical applications in seismic regions. The conference's recurring focus spans major earthquake-prone areas worldwide, including Southern Europe, Pacific Asia, the American continent, and Oceania.

Previous STESSA editions have been held in Timisoara (Romania, 1994), Kyoto (Japan, 1997), Montreal (Canada, 2000), Napoli (Italy, 2003), Yokohama (Japan, 2006), Philadelphia (USA, 2009), Santiago (Chile, 2012), Shanghai (China, 2015), Christchurch (New Zealand, 2018), and once again, Timisoara (Romania, 2022).

During the recent Conference Staff Meeting in Timisoara, a decision was made to host the next STESSA Conference in 2024, thereby recovering the lost year due to the Covid-19 pandemic. Salerno (Italy) has been chosen as the venue for STESSA 2024. Despite the pandemic challenges, the previous Timisoara Conference reaffirmed the scientific community's unwavering interest in this highly specialized forum, drawing a diverse and engaged audience. The resounding success of this conference series continues with the eleventh edition in Salerno. Five keynote lectures and 195 research presentations promise to make a significant contribution to our field's advancement.

To chart our future, we must first understand our past. Lessons gleaned from past seismic events underscore steel's enduring role as the optimal material for earthquake-resistant structures. However, some historical earthquakes have tempered the idealized image of steel. Maximizing material ductility remains a critical pursuit, necessitating a deeper grasp of circumstances and informed design practices. Rigorous analysis and adaptive design procedures are essential to address the complexities of material behavior, structural elements, and joints under extreme loading conditions during destructive earthquakes.

Enhancing structural ductility, even in adverse scenarios, remains pivotal within traditional seismic-resistant frameworks. Past research has advocated for multi-level design concepts, differentiation between near-field and far-field earthquake effects, comprehensive analyses of steel behavior during ground motions, and assessments of ductility erosion under unexpected conditions. These breakthroughs must be shared widely within the scientific community to facilitate knowledge transfer.

The beauty of steel lies in its limitless design flexibility. Every conceivable structural detail and scheme can be realized. From low-damage steel structures to innovative rocking and re-centering systems, the future of steel construction holds exciting possibilities. Our challenge is to bridge the gap between accumulating knowledge and existing design codes, translating these achievements into practical solutions.

As we gather at the conference, let the presentations serve as inspirational muses, unlocking doors to uncharted territories. Together, we propel seismic engineering forward, guided by the wisdom of both past and present.

We eagerly anticipate that all participants will relish our warm hospitality during the planned social events, including the welcome dinner and the gala dinner. Moreover, we encourage everyone to seize the opportunity to explore Salerno and its enchanting surroundings. The Amalfitan Coast, with its breathtaking vistas, awaits your discovery. Don't miss the chance to visit the archaeological area of Paestum, home to ancient Greek temples, and the iconic ruins of Pompeii.



# ORGANIZATION

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 Mario D'Aniello, University of Naples "Federico II"  
 Antonio Formisano, University of Naples "Federico II"

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Valeria Pasina, C.T.A.

# KEYNOTE SPEAKERS



Prof. Akira Wada  
*Tokyo Institute of Technology, Japan*

“Resilience Design of Long-Life Cities”



Prof. Abolhassan Astaneh-Asl  
*University of California, Berkley, USA*

“Seismic effects of the Long-distance Earth-  
quakes on the Long-Period Steel Structures”



Prof. Raffaele Landolfo  
*University of Naples “Federico II”, Italy*

“The Resiliency of Steel Moment-Resisting  
Frame Structures Against Earthquake: The  
FUTURE Project”



Prof. Robert Tremblay  
*Polytechnique Montréal, Canada*

“Gravity-controlled rocking braced frames  
with distributed SC shear fuses”

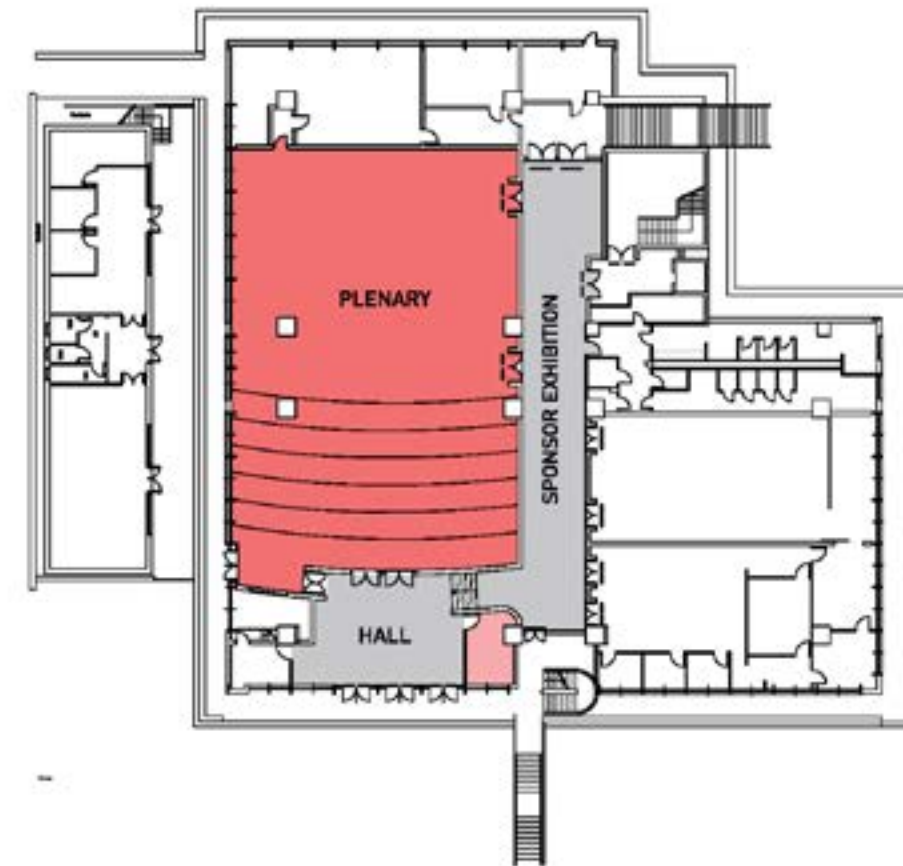


Keynote n. 5: Prof. George Charles Clifton  
*University of Auckland, New Zealand*

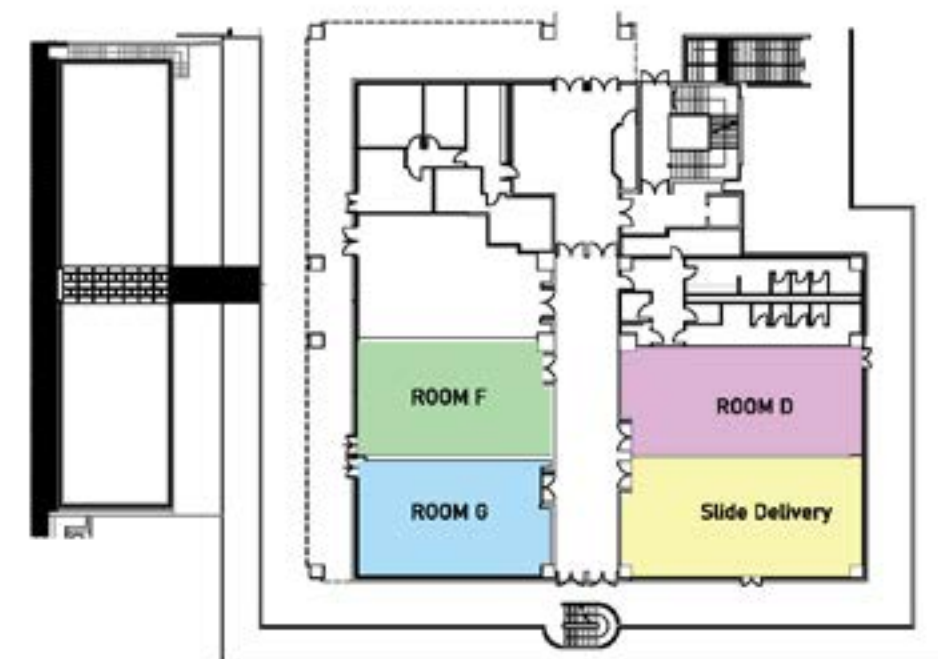
“Development and Application of the Resilient  
Sliding Hinge Joint in New Zealand”

# ROOMS MAP

GROUND FLOOR



1° FLOOR



# CONFERENCE DAY 01

## Time

8:00	Shuttle Bus to the Conference Venue (participant staying in Salerno only)
9:00	Registration
9:30	Welcome and greetings <i>Prof. Vincenzo Piluso, Chair of the STESSA 2024 Organizing Committee</i> <i>Prof. Vincenzo Loia, Rector of the University of Salerno</i> <i>Prof. Federico M. Mazzolani, Chair of the STESSA 2024 Conference</i>
10:00	<i>Chair: Prof. Federico M. Mazzolani</i> Keynote n. 1: Prof. Akira Wada <i>Tokyo Institute of Technology, Japan</i> "Resilience Design of Long-Life Cities"
10:45	Presentation of Sponsor: Nordlock
11:00	Coffee break
11:30	Parallel sessions: 1A; 1B; 1C; 1D
13:15	Lunch Break
14:45	<i>Chair: Prof. Atsushi Sato</i> Keynote n. 2: Prof. Abolhassan Astaneh-Asl <i>University of California, Berkley, USA</i> "Seismic effects of the Long-distance Earthquakes on the Long-Period Steel Structures"
15:30	Presentation of Sponsor: Krabo
15:45	Parallel sessions: 2A; 2B; 2C; 2D
17:30	Ice cream break
17:45	Welcome ceremony concert
18:15	Shuttle bus to Salerno downtown
20:00	Shuttle bus to Welcome Party (Marina di Arechi)

# CONFERENCE DAY 02

## Time

8:15	Shuttle Bus to the Conference Venue (participant staying in Salerno only)
8:45	<i>Chair: Prof. Vincenzo Piluso</i> Keynote n. 3: Prof. Raffaele Landolfo <i>University of Naples "Federico II", Italy</i> "The Resiliency of Steel Moment-Resisting Frame Structures Against Earthquake: The FUTURE Project"
9:30	Parallel sessions: 3A; 3B; 3C; 3D
11:15	Coffee break
11:45	Parallel sessions: 4A; 4B; 4C; 4D
13:30	Lunch Break
15:00	<i>Chair: Prof. Luis Da Silva</i> Keynote n. 4: Prof. George Charles Clifton <i>University of Auckland, New Zealand</i> "Development and Application of the Resilient Sliding Hinge Joint in New Zealand"
15:45	Presentation of Sponsor: Tokbo
16:00	Parallel sessions: 5A, 5B; 5C; 5D
17:45	Ice cream break
18:00	Shuttle bus to Salerno downtown
20:00	Shuttle bus to Gala Dinner (Hotel Raito)

# CONFERENCE DAY 03

## Time

9:00	Shuttle Bus to the Conference Venue (participant staying in Salerno only)
10:00	<i>Chair: Prof. Rosario Montuori</i> Keynote n. 5: Prof. Robert Tremblay <i>Polytechnique Montréal, Canada</i>
10:45	Presentation of Sponsor: Arcelormittal
11:00	Coffee break
11:30	Parallel sessions: 6A; 6B; 6C; 6D
13:15	Lunch Break
14:45	Parallel sessions: 7A; 7B; 7C; 7D
16:30	Closing ceremony
17:00	Farewell party
18:00	Shuttle bus to Salerno downtown

## PARALLEL SESSION PROGRAM

## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 1A - Plenary room Seismic Behaviour of Moment Resisting Frames Chairs: Jerome Hajjar and Rosario Montuori
11:30	<b>Force Limiting Connections to Mitigate Accelerations in Moment Resisting Frames with Pinned-Base Spines</b> <i>Jessica Duncan, Richard Sause, James Ricles, Larry Fahnestock, Barbara Simpson, Bryam Astudillo, Masahiro Kurata, Yohsuke Kawamata, Taichiro Okazaki, Zhuoqi Tao and Yi Qie</i>
11:45	<b>Plastic Design of Moment Resisting Frames with Low Ductility</b> <i>Maria Maglio, Rosario Montuori, Elide Nistri and Vincenzo Piluso</i>
12:00	<b>Conceptual investigation of the Northridge's earthquake structural failures on steel MRF by the aid of the Swiss Cheese Model</b> <i>Anthimos Anastasiadis, Marius Mosoarca and Antonio Formisano</i>
12:15	<b>Physics-Guided Machine Learning for Structural Meta-modeling and Fragility Analysis</b> <i>R. Bailey Bond, Pu Ren, Hao Sun and Jerome Hajjar</i>
12:30	<b>Seismic Performance Assessment of Optimal Steel Moment Frames Considering Structural and Non-Structural Elements</b> <i>Aydin Hassanzadeh and Saber Moradi</i>
12:45	<b>Ductility classes in prEN 1998-1. Comparative analysis on moment-resisting frames</b> <i>Bogdan Catalin Stefanescu</i>
13:00	<b>MRFs with Laser-Cut I-beam-to-CHS-Column Joints: Seismic Performance and Repairability Potential</b> <i>Cristian Vulcu, Rafaela Don, Damian Händeler, Benno Hoffmeister and Alper Kanyilmaz</i>

## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 1B - Room D Seismic Behaviour of Braced Frames I Chairs: Lydell Wiebe and Dimitrios Lignos
11:30	<b>Proposed limits of stiffener spacing requirements for short and intermediate length ebf steel links</b> <i>Nikolaos Skretas, Theodore Karavasilis and Dimitrios Lignos</i>
11:45	<b>Axial Load Effects on the Response of Yielding Links in Eccentrically Braced Frames</b> <i>Pedram Mortazavi, Oh-Sung Kwon and Constantin Christopoulos</i>
12:00	<b>Improving procedures for seismic design of foundation of steel braced frames in Canada</b> <i>Angel Reyes-Fernandez, Sanda Koboevic and Lydell Wiebe</i>
12:15	<b>HCWs with Replaceable Shear Links: Experimental Input and Seismic Performance of a Multi-Story Building</b> <i>Cristian Vulcu, Benno Hoffmeister, Rajarshi Das and Herve Degee</i>
12:30	<b>Performance Evaluation of Short Links with Flush and Extended End Plate Connections through FEM Analysis under Cyclic Loading</b> <i>Francesco Plaitano, Aurel Stratan and Elide Nistri</i>
12:45	<b>Design Procedure for Eccentrically Braced Steel Frames</b> <i>Rosario Montuori, Elide Nistri, Vincenzo Piluso, Alessandro Pisapia and Chiara Scafuri</i>
13:00	<b>Pinned and Fixed Connections in Six Storied "Inverted Y-braced" Frames</b> <i>Helmuth Kober, Marina Stoian, Elena Ramona Marcu and Alexandra Maria Diriuş</i>



## CONFERENCE DAY 01 – Monday 08, July 2024

Time	Session 1C – Room F Steel Connections I Chairs: Dan Dubina and Luís Simões da Silva
11:30	<b>Cyclic modeling of bolted beam-to-column steel joints: component model implementation incorporating pinching and stiffness and strength degradation</b> <i>Luis Silva, Ricardo Costa, Sara Oliveira, Francisca Santos and Carlos Rebelo</i>
11:45	<b>Seismic performance of beam-column connection according to load velocity</b> <i>Sanghoon Oh and Jaehan Park</i>
12:00	<b>Deformation Capacity of Steel Beam-to-column Connections Evaluated Based on Strain Histories</b> <i>Yu Jiao and Satoshi Yamada</i>
12:15	<b>Bolted T-stub macro-components under combined cyclic and monotonic loading</b> <i>Florea Dinu, Calin Neagu, Ioan Marginean, Dan Dubina, Pavlos Thanopoulos and Ioannis Vayas</i>
12:30	<b>Proposal of Design Bending Demand for Column Joint of Steel Moment Frames</b> <i>Iathong Chan and Yuji Koetaka</i>
12:45	<b>Three-Dimensional Macro-Modeling of Major- and Minor-Axis Joints in Beam-to-Wide-Flange Section Column Joints</b> <i>Yukihiro Harada and Luís Simões da Silva</i>
13:00	<b>Finite Element Evaluation of New Retrofit Schemes for Pre-Northridge Connections</b> <i>Paul Richards</i>

## CONFERENCE DAY 01 – Monday 08, July 2024

Time	Session 1D – Room G Robustness of steel structures Chairs: Shahab Ramhormozian and Alberto Mandara
11:30	<b>Robustness assessment of multi-story steel frames in post-earthquake localized fire scenarios</b> <i>Dominiq Jakab, Florea Dinu and Dan Dubina</i>
11:45	<b>The ROBUST Steel Building Response</b> <i>Gregory MacRae, Liang-Jiu Jia, Charles Clifton, Rajesh Dhakal, Ping Xiang, Shahab Ramhormozian, Geoff Rodgers, Zhenduo Yan, Pierre Quenneville and Xianzhong Zhao</i>
12:00	<b>Offsite Construction, Quality Assurance, Transportation, and On-table Changeovers of the Friction-Based Seismic Resilient Steel Framed ROBUST Building</b> <i>Shahab Ramhormozian, Zhenduo Yan, Charles Clifton, Greg MacRae, Liang Jiu Jia, Xianzhong Zhao, Geoff Rodgers, Pierre Quenneville, Rajesh Dhakal and Ping Xiang</i>
12:15	<b>Use of roof mega-trusses for progressive collapse retrofit of existing buildings</b> <i>Massimiliano Ferraioli, Angelo Lavino, Alberto Mandara and Gianfranco De Matteis</i>
12:30	<b>Effect of steel moment-frame connections on robustness of steel frames against progressive collapse</b> <i>Massimiliano Ferraioli, Osvaldo Pecorari, Angelo Lavino and Alberto Mandara</i>
12:45	<b>Strengthening solution for low-damage seismic dissipative beam-to-column joints in case of column loss scenario</b> <i>Roberto Carlevaris, Roberto Tartaglia, Mario D'Aniello, Raffaele Landolfo, Jean Pierre Jaspar, Jean-François Demonceau, Tudor Goalea, Massimo Latour and Vincenzo Piluso</i>
13:00	<b>Residual Stress Effects on Steel Structure Seismic Response</b> <i>Gregory MacRae and Arthur Lu</i>



## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 2A - Plenary Room Steel Connections II Chairs: Luigi Di Sarno and Cristian Vulcu
15:45	<b>Cyclic tests on hybrid inter-module joints with high-damping rubber</b> <i>Dan-Adrian Corfar and <u>Konstantinos Daniel Tsavdaridis</u></i>
16:00	<b>Seismic performance of steel moment-resisting frames utilizing dissipative embedded column base connections</b> <i>Hiroyuki Inamasu, Nenad Bijelic and Dimitrios Lignos</i>
16:15	<b>Numerical Simulations of Exposed Column-Base Plate Connections in Existing Steel Frames</b> <i>Luigi Di Sarno, Jingren Wu, Fabio Freddi and Mario D'Aniello</i>
16:30	<b>Traditional and Machine-Learning Numerical Models for Partial-Strength Extended Endplate Connections</b> <i>Hongchao Xu, Zizhou Ding and <u>Ahmed Elkady</u></i>
16:45	<b>Design for Additive Manufacturing of Crescent Shaped Brace device to strengthen pinned beam-column connections</b> <i>Lidiana Arrè, Vittoria Laghi, Giada Gasparini, Tomaso Trombetti, <u>Michele Palermo</u> and Stefano Silvestri</i>
17:00	<b>Nonlinear Modeling and Seismic Performance Evaluation: A Case Study of a Moment Frame with Equal-Strength Connections</b> <i>Cristian Vulcu, Rafaela Don, Georgios Balaskas and Benno Hoffmeister</i>
17:15	<b>Nonlinear Response of a Steel Moment-Resisting Frame with Dissipative Connections</b> <i>Rafaela Don, Georgios Balaskas, Cristian Vulcu and Benno Hoffmeister</i>

## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 2B - Room D Tall and Special structures Chairs: Elena Mele and James Malley
15:45	<b>Strength of welded connections in unanchored steel liquid storage tanks under seismic loading</b> <i>Theocharis Papatheocharis, George E. Varelis, Philip C. Perdikaris and Spyros A. Karamanos</i>
16:00	<b>Seismic Protection System to Prevent Elephant-Foot Buckling in Unanchored Storage Tanks</b> <i>Jose Colombo, Nicolás Padilla and Jose Almazán</i>
16:15	<b>Seismic Performance of Tall Steel Framed Buildings Built Between 1960 - 1994</b> <i>James Malley and Robert Pekelnicky</i>
16:30	<b>Integrating Viscoelastic Damping Elements for Enhanced Seismic Stability in Tall Steel Buildings under Subduction Interface Earthquakes</b> <i>Bashar Hariri, Chiyun Zhong, Michael Montgomery and Constantin Christopoulos</i>
16:45	<b>Seismic performance of jacket-supported offshore wind turbines</b> <i>Zeyad Khalil, Peter Stafford and Ahmed Elghazouli</i>
17:00	<b>FEM-based preliminary design of a vibration monitoring system in the context of decommissioned and reinstalled wind towers</b> <i>Marco Casazza, Rosario Montuori, Elide Nastri, Vincenzo Piluso, Flavio Stochino, Marco Zucca, Claudio Bernuzzi, Marco Simoncelli and Fabrizio Barone</i>
17:15	<b>Vertical component effect of ground motion on the seismic performance of a typical petrochemical plant</b> <i>Luigi Di Sarno and Armin Majidian</i>

## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 2C - Room F
	Behaviour of Buckling Restrained Braces Chairs: Aurel Stratan and Aurelio Ghersi
15:45	<b>Experimental Qualification of a Long Buckling-Restrained Brace</b> <i>Ben Sitrler, Kohji Nishimoto and Takuma Shiomi</i>
16:00	<b>A Fundamental Study on Measurement Method of Plastic Heat Generation and Thermal Analysis of Buckling Restrained Knee Brace with The Wood</b> <i>Yuki Jin, Riku Fujie, Natsuhiko Sakiyama, Haoda Teng, Haruna Hiromatsu and Takumi Ito</i>
16:15	<b>Bidirectional loading test of buckling-restrained braces with gusset plate connections</b> <i>Yuji Koetaka, Yuki Tamura, Ryota Tobaru and Tomohiro Kinoshita</i>
16:30	<b>Buckling Restrained Braces - Issues and Solutions</b> <i>Gregory MacRae and Chin-Long Lee</i>
16:45	<b>Experimental and Finite Element Study of Cantilever Stiffened Buckling-Restrained Brace</b> <i>Arum Jang and Young K. Ju</i>
17:00	<b>Cumulative Ductility and Strain Demands of Steel Buckling-Restrained Braces Subjected to Earthquake Displacement Histories</b> <i>Gabriel Capettini and Ali Imanpour</i>
17:15	<b>Design of buckling restrained braced frame structure for the "Marie Skłodowska Curie" hospital in Bucharest</b> <i>Toma-Florin Voica, Aurel Stratan and Anna Ene</i>

## CONFERENCE DAY 01 - Monday 08, July 2024

Time	Session 2D - Room G
	Rocking and self-centering structures Chairs: Massimiliano Ferraioli and László Gergely Vigh
15:45	<b>High-Performance Steel-Timber Hybrid Rocking Shear Wall System for Mid-Rise to High-Rise Buildings: Preliminary Seismic Study</b> <i>Aly Al Samouly and Cristiano Loss</i>
16:00	<b>Seismic Performance of a Resilient Controlled Multiple-Rocking-Column Steel Frame System</b> <i>Liang-Jiu Jia, Hong-Tai Zhang, Yu-Ao Lin, Wenhao Sun, Bing Zhao, Rui Zhang, Ping Xiang and Guan-Qing Song</i>
16:15	<b>Use of energy-dissipative rocking steel columns for seismic rehabilitation of existing buildings</b> <i>Massimiliano Ferraioli, Biagio Laurenza, Angelo Lavino and Gianfranco De Matteis</i>
16:30	<b>Design Examples of Controlled Rocking Braced Frames for Low-Rise Buildings in Canadian Regions of Low Seismicity</b> <i>Lillian Wilson, Taylor Steele, Cancan Yang and Lydell Wiebe</i>
16:45	<b>Self-centering rocking steel frame with central shear key design considerations and frame seismic performance</b> <i>Yudi Zhang, Gregory MacRae, Kiran Rangwani and Liangjiu Jia</i>
17:00	<b>Nonlinear Seismic Performance of self-centering steel plate shear walls with openings</b> <i>Mahtabsadat Razavi and Anjan Bhowmick</i>
17:15	<b>Probabilistic Seismic Resilience Evaluation of Smart Steel Frame</b> <i>Sara Muhammad Elqudah, Sardasht S. Weli and László Gergely Vigh</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 3A - Plenary Room Codes and standards Chairs: Melina Bosco and Mario D'Aniello
09:30	<b>Behaviour of Gusset plate connections designed according to prEN 1998-1-2:2022</b> <i>Massimo Cicia, Mario D'Aniello and Raffaele Landolfo</i>
09:45	<b>Brace-to-beam connections of chevron-concentrically braced frames in the framework of prEN 1998-1-2:2022</b> <i>Massimo Cicia, Mario D'Aniello and Raffaele Landolfo</i>
10:00	<b>X-concentrically braced frames designed according to the second generation of Eurocode 8</b> <i>Massimino Gnazzo, Mario D'Aniello and Raffaele Landolfo</i>
10:15	<b>Chevron concentrically braced frames designed according to the second generation of Eurocode 8</b> <i>Massimino Gnazzo, Mario D'Aniello and Raffaele Landolfo</i>
10:30	<b>Effectiveness Of A Design Procedure For Linked Column Framed Systems In The Framework Of Eurocodes</b> <i>Francesca Barbagallo, Melina Bosco, Elga Mangiameli and Pier Paolo Rossi</i>
10:45	<b>Eccentrically Braced frames designed according to the second generation of Eurocode 8</b> <i>Alessandro Prota, Aldo Milone and Raffaele Landolfo</i>
11:00	<b>Evaluation of the new version of Eurocode 8 for the seismic design of steel buildings</b> <i>José Fontão Carvalho, Vitor Monteiro, Tiago Ribeiro, Luis Macedo and José Miguel Castro</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 3B - Room D Retrofitting I Chairs: Tzvetan Georgiev and Pavlos Thanopoulos
09:30	<b>Earthquake sequence in Kahramanmaraş, Turkey - Report on the behaviour of precast industrial buildings and proposals for improvement</b> <i>Pavlos Thanopoulos, Minoas-Vasileios Bampatsikos, Ioannis Vayas, Florea Dinu and Calin Neagu</i>
09:45	<b>Seismic Performance and Retrofitting of Prefabricated Industrial RC Buildings using Conventional Steel Braces</b> <i>Ahmet Bal, Selin Koca and Oguz C. Celik</i>
10:00	<b>Numerical model and seismic vulnerability of infilled industrial steel structures</b> <i>Francesco Salvatore Liguori, Antonio Madeo and Antonio Formisano</i>
10:15	<b>Influence of sandwich panels as building envelope on the nonlinear dynamic response of an industrial steel structure</b> <i>Lara Bittner, Cristian Vulcu and Benno Hoffmeister</i>
10:30	<b>Performance evaluation of low-disturbance seismic retrofit method for steel column bases using curved member</b> <i>Kun-Sian Lin, Masahiro Kurata, Yutaro Kawasaki and Yoshio Kitatani</i>
10:45	<b>Seismic Behaviour of Damaged Steel Frames Retrofitted with Inerters</b> <i>Christian Málaga-Chuquitaype and Faridah Zahra</i>
11:00	<b>Field observations and assessment of performance level of steel structures after the Kahramanmaras Earthquake Sequence of 2023</b> <i>Tzvetan Georgiev</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 3C - Room F Seismic Behaviour of steel structures I Chairs: Ahmed Elghazouli and José Miguel Castro
09:30	<b>Shake-Table Collapse Tests of a Reduced-Scale, 4-Story Steel Moment-Resisting Frame</b> <i>Martin Somarriba, Taichiro Okazaki, Takuya Nagae, Tomohiro Matsumiya and Noriyuki Takahashi</i>
09:45	<b>Numerical Simulation of a Reduced-Scale 4-Story Steel Moment-Resisting Frame Tested to Collapse</b> <i>Jionghui Li, Martin Somarriba, Taichiro Okazaki, Takuya Nagae and Ryota Matsui</i>
10:00	<b>Preliminary Investigation of the Influence of Soil-Structure Interaction on the Nonlinear Response of Steel MRFs with Dissipative Connections</b> <i>Georgios Balaskas, Chiara Amendola, Rafaela Don, Christos Petridis, Cristian Vulcu, Stefania Apostolaki, Dimitris Pitilakis and Benno Hoffmeister</i>
10:15	<b>Smart MRF Structural Performance Evaluation Under Seismic Followed by Blast Loading Scenario</b> <i>Sardasht S. Weli, László Gergely Vigh and Sara Muhammad Elqudah</i>
10:30	<b>Seismic design forces for ancillary elements in multi-storey steel framed structures</b> <i>Ahmed Elghazouli, Xiapeng Ding and Maria Liapopoulou</i>
10:45	<b>Seismic design of modular steel buildings - A comprehensive review</b> <i>Rita Peres, Cyrus Eshaghi, Elisa Cerqueira and José Miguel Castro</i>
11:00	<b>Proposed In-plane Buckling Brace Connection Detailing to Prevent Fracture at High Lateral Drifts</b> <i>Pratik Patra, Dipti Sahoo and A.K. Jain</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 3D - Room G High strength and stainless steel Chairs: Vincenzo Piluso and Fangxin Hu
09:30	<b>Research on the Seismic Performance of High Strength Steel Frames</b> <i>Lintao Hou, Gang Shi and Fangxin Hu</i>
09:45	<b>Monotonic and Cyclic Behaviour of Bolted High-Strength Steel T-Stub</b> <i>Fangxin Hu and Zhan Wang</i>
10:00	<b>Comparison of Fracture model parameters for Indian Stainless Steel</b> <i>Anirudh Painuly, Tamilselvan Nambirajan and Pc Ashwin Kumar</i>
10:15	<b>Effect of Accelerated Corrosion on Mechanical Properties of 409M Stainless Steel</b> <i>Aashima Sharma, Anirudh Painuly, Tamilselvan Nambirajan, Diptarka Ghosh and Pc Ashwin Kumar</i>
10:30	<b>Numerical study on the seismic performance of CFST modular frame with stainless steel connections</b> <i>Xinxiang Liang and Chao Hou</i>
10:45	<b>Low-Cycle Fatigue Performances Including Large Plastic Strain of SUS821L1 Lean Duplex Stainless Steel</b> <i>Thaileang Touch, Shoichi Kishiki and Satoshi Yamada</i>
11:00	<b>Experimental assessment of austenitic stainless steel shear links under cyclic loading</b> <i>Aurel Stratan and Anna Ene</i>



## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 4A - Plenary Room Behaviour of steel and composite structures I Chairs: Chiara Bedon and Emidio Nigro
11:45	<b>A simplified seismic environmental performance assessment method and its application to steel-concrete composite moment frames</b> <i>Jiajun Du, Wei Wang and Shiye Wang</i>
12:00	<b>Assessment of a macro-model component-based approach for steel-concrete composite joints in seismic areas</b> <i>Marco Fasan and Chiara Bedon</i>
12:15	<b>Simplified component-based modelling of seismic resistant steel-concrete composite joints and frames</b> <i>Marco Fasan and Chiara Bedon</i>
12:30	<b>Parametric Study on Behavior of Moment Resisting RCS Composite Joints</b> <i>Gunuru Shiva Kumar, Krishna Murari and PC Ashwin Kumar</i>
12:45	<b>Advanced Cyclic Assessment of an Existing Steel-Concrete Composite Road Bridge</b> <i>Aldo Milone and Raffaele Landolfo</i>
13:00	<b>Fire fragility assessment of steel-concrete composite bridges in a multi-hazard framework</b> <i>Donatella de Silva, Andrea Miano, Gabriella De Rosa, Andrea Prota and Emidio Nigro</i>
13:15	<b>Experimental Investigation on the Structural Performance of Steel-Concrete Composite Slabs Incorporating Recycled Aggregates from Construction and Demolition Waste</b> <i>Flavio Stochino, Marco Zucca, Marco Simoncelli, Alireza Alibeigibeni, Giovanna Concu, Monica Valdes, Marco Andrea Pisani, Claudio Bernuzzi, Marta Saccone and Luisa Pani</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 4B - Room D Seismic behaviour of Braced Frames II Chairs: Gianfranco De Matteis and Gregory MacRae
11:45	<b>Numerical Simulation of a Shaking Table Test of a Steel Centrally-Braced Frame</b> <i>Greta Agata Venneri, Raffaele De Risi, Gianfranco De Matteis and Giuseppe Brando</i>
12:00	<b>Influence of concentrically braced frame footing design on recovery time</b> <i>Hamid Madani, Lydell Wiebe, Peijun Guo and Sanda Kobojevic</i>
12:15	<b>Details Resembling the "Dog-bone" in Seismic Resistant Centrally Braced Frames</b> <i>Helmuth Köber, Elena Ramona Marcu and Marina Stoian</i>
12:30	<b>Preliminary Numerical Study of a Steel Centrally Braced Frame Equipped With Dissipative Braces And Self-Centring Column Bases</b> <i>Elena Elettore, Antonella Bianca Francavilla, Fabio Freddi, Massimo Latour and Gianvittorio Rizzano</i>
12:45	<b>Additively Manufactured Fuse for Concentric Braced Frame: Cylindrical Design</b> <i>Islam Mantawy and Hamdy Farhoud</i>
13:00	<b>Damage Concentration and Column Flexural Demands in Steel Chevron Braced Frames Designed to Canadian Provisions</b> <i>Bardia Mahmoudi and Ali Imanpour</i>
13:15	<b>Seismic Symmetric Friction Dissipater for Steel Braced Frames</b> <i>Jose Christian Chanchi Golondrino, Daniela Andrea Riascos Montenegro and Gregory Anthony MacRae</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 4C - Room F Cold-formed Chairs: Atsushi Sato and Pier Paolo Rossi
11:45	<b>FE models of cold-formed steel panels with burring holes for the seismic retrofit of existing buildings</b> <i>Michelle Gualdi, Andrea Belleri, Simone Labò, Alessandra Marini and Atsushi Sato</i>
12:00	<b>Influence of Eccentricity on Elastic Critical Buckling Load and Behavior of Cold-formed Steel Lipped Channel Columns</b> <i>Ryosuke Makieda, Kazuya Mitsui and Kikuo Ikarashi</i>
12:15	<b>Test and parametric analysis on performance improvement of non-buckling corrugated steel shear walls</b> <i>Hua-Jian Jin, Fei-Fei Sun, Guo-Qiang Li and Yu-Shu Liu</i>
12:30	<b>In-Plane Tests of Cold-Formed Steel Shear Walls Sheathed with Gypsum Sheathing</b> <i>Luigi Fiorino, Amirhossein Nikpour, Alessandro Prota and Raffaele Landolfo</i>
12:45	<b>Seismic Characteristics of Cold-Formed and Hot-Rolled Steel Hybrid Modular Wall Panels with Opening</b> <i>Thamizhinian Balasubramaniam, PC Ashwin Kumar and Mohammad Adil Dar</i>
13:00	<b>Influence of geometric properties and axial load ratio on the rotation capacity of cold-formed steel square hollow sections</b> <i>Melina Bosco, Marco Caragliano, Mario D'Aniello, Raffaele Landolfo and Pier Paolo Rossi</i>
13:15	<b>Simulation Of The Cyclic Response of Cold Formed Steel Hss Members by the Ibarra-Krawinkler Model</b> <i>Melina Bosco, Marco Caragliano, Edoardo Michele Marino and Pier Paolo Rossi</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 4D - Room G Seismic devices Chairs: Dan Bompa and James M. Ricles
11:45	<b>Seismic performance of steel tubes infilled with rubberised AAC materials</b> <i>Ahmed Elghazouli, Mohamed Elzeadani and Dan Bompa</i>
12:00	<b>Numerical modelling of a 3D-printed metal damper designed using topological and geometrical optimization algorithms</b> <i>Francesca Romana Andreacola and Giuseppe Brando</i>
12:15	<b>Behavior and design of dumbbell-shaped steel strip dampers</b> <i>Salvatore Mottola, Massimiliano Ferraioli, Euripidis Mistakidis and Gianfranco De Matteis</i>
12:30	<b>Seismic Upgradation of Moment Resisting Frame Structures using Buckling-inhibited Shear Yielding Dampers</b> <i>Deepak Yadav, Subhrajyoti Jena and Dipti Ranjan Sahoo</i>
12:45	<b>Enhanced Seismic Efficiency and Resiliency of Steel-Frame Buildings Using Viscous-Dampers</b> <i>James Ricles, Richard Sause and Baiping Dong</i>
13:00	<b>Efficient and Performance-Based Design Method for Seismic Resistance of Steel MRF Structure with Nonlinear Viscous Dampers</b> <i>Baiping Dong</i>
13:15	<b>Frame structures damage detection system and evaluation method based on twist slit damper plastic energy dissipation</b> <i>Haoda Teng, Riku Fujie, Natsuhiko Sakiyama, Haruna Hiromatsu, Yuki Jin, Takumi Ito and Donghang Wu</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 5A - Plenary Room Low and High Cycle Fatigue on Steel Members and Structures Chairs: Federico M. Mazzolani and G. Charles Clifton
16:00	<b>Cyclic response of welded T-joints between SHS profiles and through-all plates</b> <i>Sabatino Di Benedetto, Massimo Latour, Giovanni Zampoli, Antonella Bianca Francavilla and Gianvittorio Rizzano</i>
16:15	<b>Structural Behavior and Low Cycle Fatigue Characteristics of Suspension Support Member for Building Equipment</b> <i>Ichiro Hirano, Miku Kurosawa and Shoichi Kishiki</i>
16:30	<b>Accuracy of Evaluation Methodologies for Low-Cycle Fatigue Performance of Steel Beam-End Connections</b> <i>Sometrey Mey, Shoichi Kishiki and Takashi Hasegawa</i>
16:45	<b>Experimental Investigation of Modified Steel Braces for Ultra-Low Cycle Fatigue Endurance</b> <i>Tzvetan Georgiev</i>
17:00	<b>Low-cycle fatigue performance of buckling-restrained Fe-SMA plates under axial cyclic loading</b> <i>Xi-Yang Yu and Yan-Wen Li</i>
17:15	<b>Modelling And Experimental Investigation Of Ductile Crack Initiation In Welded Connections With Bevelled Backing Bars And Inelastic Panel Zones</b> <i>Andronikos Skiadopoulos and Dimitrios Lignos</i>
17:30	<b>Fracture of Extended Stiffened End-Plate Moment Connections with Built-Up Beams</b> <i>Matthew Eatherton and Thomas Murray</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 5B - Room D Retrofitting II Chairs: Enzo Martinelli and Edoardo Michele Marino
16:00	<b>Evaluation of different configurations of steel exoskeletons for the seismic retrofit of existing buildings</b> <i>Simone Labò, Andrea Belleri, Alessandra Marini and Chiara Passoni</i>
6:15	<b>Effectiveness of seismic upgrading of confined masonry buildings by e-EXOS: a case study in Bucharest</b> <i>Francesca Barbagallo, Melina Bosco, William Leni, Edoardo M. Marino and Pier Paolo Rossi</i>
16:30	<b>Steel exoskeletons for seismic upgrading of RC frame buildings: Analysis of various design criteria</b> <i>Francesco Nigro, Gaetano Della Corte and Enzo Martinelli</i>
16:45	<b>Improving Seismic Performance of Existing Schools: Design and Analysis of Steel Exoskeleton Systems</b> <i>Alessandro Prota, Roberto Tartaglia and Raffaele Landolfo</i>
17:00	<b>Design method of lightweight steel exoskeletons for seismic-energy upgrading of existing RC buildings</b> <i>Emilia Meglio, Antonio Davino and Antonio Formisano</i>
17:15	<b>Enhancing Seismic Performance of Steel Plate Shear Walls Through Innovative Design and Curved Shape Slots</b> <i>Hadi Monsef Ahmadi, Maria Zucconi, Barbara Ferracuti and Antonio Formisano</i>
17:30	<b>Application of anti-seismic devices with metal foam core for the retrofitting of an existing steel structure</b> <i>Sabatino Di Benedetto, Massimo Latour, Antonella Bianca Francavilla, Gianvittorio Rizzano, Roberto Tartaglia, Mario D'Aniello and Raffaele Landolfo</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 5C - Room F Steel Connections III Chairs: Fernando Fraternali and Gianvittorio Rizzano
16:00	<b>Application of resilient joint with steel rod fuse in plastic damage mitigation of steel moment frame under earthquake event</b> <i>Guo-Qiang Li and Yunlong Zhong</i>
16:15	<b>Stress distribution in the bolted flange connection with gasket subjected to cyclic loading condition</b> <i>N Rino Nelson</i>
16:30	<b>Influence of the RFS Geometry on the Performance of Dissipative Slim-Floor Beam-to-Column Joints</b> <i>Rafaela Don, Cristian Vulcu, Adrian Ciutina and Aurel Stratan</i>
16:45	<b>CBFEM for capacity design of prequalified joints</b> <i>Adam Kozousek</i>
17:00	<b>Development of a Quasi-Static Bidirectional Loading Protocol for the Seismic Evaluation of Hybrid RC-SCC Beam-Column Joints</b> <i>S. Lalit Sagar, Dipti Ranjan Sahoo, T.P. Anand and Vasant A. Matsagar</i>
17:15	<b>Seismic Moment End Plate Joint Performance under Fire Conditions</b> <i>Gordon Chen, Anthony Abu and Gregory MacRae</i>
17:30	<b>Numerical investigations on improving beam-column joint seismic performances using replaceable BRFCs</b> <i>Zhi Zhang, Chaonan Li, Liling Cao and Yulong Feng</i>

## CONFERENCE DAY 02 - Tuesday 09, July 2024

Time	Session 5D - Room G Seismic behaviour of steel walls Chairs: Daniel Dan and Benno Hoffmeister
16:00	<b>Seismic behaviour of an innovative hybrid coupled wall system investigated through cyclic tests</b> <i>Rajarshi Das, Dan Dragan, Glenn van Vugt, Cristian Vulcu, Fabrizio Scozzese, Agnese Natali, Alessandro Zona, Francesco Morelli, Benno Hoffmeister and Herve Degee</i>
16:15	<b>Modal damping and seismic performance of damped shear wall system for tall buildings in high seismic zones</b> <i>Yuki Terazawa, Toru Takeuchi and Mizuki Tanaka</i>
16:30	<b>Dual multistory steel frames with replaceable ductile steel shear panels</b> <i>Calin Neagu, Florea Dinu, Dan Dubina and Mihai Senila</i>
16:45	<b>Overview of Concrete-Filled Composite Plate Shear Wall Systems for Mid- and High-rise Buildings</b> <i>Mohammad Froozanfar, Saber Moradi and Reza Kianoush</i>
17:00	<b>Theoretical and experimental study of hybrid steel-concrete walls with openings subjected to seismic actions</b> <i>Vlad-Şerban Popescu, Daniel Dan, Sorin-Codruţ Floruţ, Viorel Todea and Valeriu Augustin Stoian</i>
17:15	<b>Ultimate State of Drilling Screw Joint in Non-structural Metal Exterior Wall</b> <i>Miku Kurosawa and Shoichi Kishiki</i>
17:30	<b>Developing Seismic Fragility Curves using ANN based Probabilistic Seismic Demand Models Derived from Structural Design Parameters</b> <i>Hakjong Chang, Junhee Kim and Sanhjin Hahn</i>



## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 6A - Plenary Room Seismic isolated systems and patents Chairs: Fabrizio Barone and Paolo Castaldo
11:30	<b>Optimal response of isolated multi-span continuous deck bridges subjected to near fault and far field events</b> <i>Paolo Castaldo and Elena Miceli</i>
11:45	<b>Shaking Table Tests on Variable Damping Semi-active Control of Base-isolated Steel Frame Structures under Ground Motions</b> <i>Zhong-Xian Li, Dongbin Wen, Yundong Shi and Yang Ding</i>
12:00	<b>Seismic Performance of Steel Frame Structures with Layered Three-Dimensional Isolation System</b> <i>Yuchen Wang, Yundong Shi, Qi Wang, Wenqing Dong, Yang Ding and Zhong-Xian Li</i>
12:15	<b>Steel vertical extension of existing buildings with isolation system: diagram-based design approach and validation through a case study</b> <i>Francesco Esposito, Diana Faiella and Elena Mele</i>
12:30	<b>An innovative mechanical filter for seismic isolation of metallic structures</b> <i>Fabrizio Barone, Marco Casazza and Rocco Romano</i>
12:45	<b>Seismic metaisolators manufactured through rapid prototyping techniques</b> <i>Fernando Fraternali, Valentina Adinolfi, Giovanni Germano and Gianmario Benzoni</i>
13:00	<b>Reduced-scale dynamic loading tests on seismic isolation bearing excluding friction and inertia forces</b> <i>Toru Takeuchi, Yoshikazu Takahashi, Yukio Umemura, Yuki Terazawa, Keita Uemura and Tomoya Ueda</i>

## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 6B - Room D Low damage systems Chairs: Geoffrey Rodgers and Massimo Latour
11:30	<b>C3 Building of Salerno University Campus: The First Building with FREEDAM Technology</b> <i>Vincenzo Piluso, Massimo Latour, Rosario Montuori and Elide Nastri</i>
11:45	<b>Seismic assessment of the DREAMERS building prototype</b> <i>Poursadrollah Arash, Roberto Tartaglia, Mario D'Aniello, Raffaele Landolfo, Massimo Latour and Vincenzo Piluso</i>
12:00	<b>Experimental behaviour of friction joints with different bolting assemblies and disk springs layout</b> <i>Antonella Bianca Francavilla, Massimo Latour, Gianvittorio Rizzano, Francesco Nigro and Vincenzo Piluso</i>
12:15	<b>Finite Element Modelling (FEM) of the Asymmetric Friction Connection (AFC) with Belleville Springs (BeSs): Ongoing developments of bolt and BeS modeling</b> <i>Fatemeh Alizadeh, Shahab Ramhormozian and Charles Clifton</i>
12:30	<b>Shake Table Testing of a Low-Damage Steel Frame Building Incorporating Asymmetric And Symmetric Friction Connections</b> <i>Zhenduo Yan, Shahab Ramhormozian, G. Charles Clifton, Gregory MacRae, Geoffrey Rodgers, Pierre Quenneville, Rajesh Dhakal, Ping Xiang, Liang-Jiu Jia and Xianzhong Zhao</i>
12:45	<b>Feasibility Study of the Flat Joint Method Using High-Tension Bolt Friction Joints in Light-Gauge Steel Structures and Fundamental Study on Resistant Mechanism</b> <i>Nagi Hamada, Jihang Feng, Takumi Ito, Natsuhiko Sakiyama, Katsunori Onishi, Kenjiro Mori and Rikako Hotta</i>
13:00	<b>Hysteretic model of frictional steel truss coupling beams</b> <i>Yao Cui, Qi Tang and Tao Wang</i>

## CONFERENCE DAY 03 – Wednesday 10, July 2024

Time	Session 6C – Room F
	Steel Connections IV Chairs: Gian Andrea Rassati and Beatrice Faggiano
11:30	<b>Evaluation of Cyclic Response of Hybrid Steel-Timber Frame Members</b> <i>Dan Bompa, A. Chira and Ahmed Elghazouli</i>
11:45	<b>Ductile timber beam to steel column connection with replaceable fuses</b> <i>Reyhaneh Hosseini and Hamid Valipour</i>
12:00	<b>Design of Steel Collar Connectors for Timber Concrete Composite Floors</b> <i>Giacomo Iovane, Martina Lombardi, Pasquale Carbone, Federico M. Mazzolani and Beatrice Faggiano</i>
12:15	<b>Effective width of slab for composite beam at joint region</b> <i>Masaki Arita, Yuichi Nishida, Richard Liew Jat Yuen and Taichiro Okazaki</i>
12:30	<b>Role Slab Continuity and Framing Action on the Collapse Behavior of Composite Steel Moment Resisting Frames: Insights from Full-Scale Experiments</b> <i>Hammad El Jisr and Dimitrios Lignos</i>
12:45	<b>Moment-rotation response of 3D beam-to-column joints with and without the slab</b> <i>Roberto Tartaglia, Mario D'Aniello, Gian Andrea Rassati and Raffaele Landolfo</i>
13:00	<b>Bi-directional loading tests of weak panel-type subassemblies consisting of circular-hollow-section columns and H-beams with floor slab</b> <i>Yosuke Ashida, Yuji Koetaka and Tatsuya Nakano</i>

## CONFERENCE DAY 03 – Wednesday 10, July 2024

Time	Session 6D – Room G
	Seismic Behaviour of steel structures II Chairs: Edgar Tapia-Hernández and Lucia Tirca
11:30	<b>Simplified risk-based design of steel structures</b> <i>Nicholas Clemett and Max Gündel</i>
11:45	<b>Seismic Analysis and Design of an Industrial Complex of Buildings located in Ecuador</b> <i>Pedro P. Rojas, José Barros, Joseph Hernández and Reina Paguay</i>
12:00	<b>Investigation on Seismic Performance Degradation of Hub Large-Span Roof Structures Considering Corrosion and Damage Accumulation</b> <i>Yang Ding, Qi Si and Liang Zong</i>
12:15	<b>Lateral seismic performance assessment of CFST-RC hybrid frame structures</b> <i>S Sivraj, Liza and Dipti Ranjan Sahoo</i>
12:30	<b>Material strength uncertainty and seismic capacity design for steel structures: considerations and standards</b> <i>Riccardo Zanon and Francesco Profico</i>
12:45	<b>Seismic performance of a steel building under the 2023 Turkey Earthquake Sequence</b> <i>Edgar Tapia-Hernández and Mehmet Cemal Genes</i>
13:00	<b>Survey of Seismic Repair to School Gymnasium damaged by the 2016 Kumamoto Earthquake</b> <i>Ayumi Kuwahara, Teppei Toyota and Shoichi Kishiki</i>

## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 7A - Plenary Room Braced frames and environmental damage detection systems Chairs: Marco Casazza and Pedram Mortazavi
14:45	<b>Proposed Design Guidelines for EBFs Designed with Cast Steel Replaceable Modular Yielding Links</b> <i>Pedram Mortazavi, Oh-Sung Kwon and Constantin Christopoulos</i>
15:00	<b>Optimal placement of damage-free self-centring links in steel EBFs</b> <i>Annarosa Lettieri, Sabatino Di Benedetto, Bianca Nicole Dell'Acqua, Fabio Freddi, Massimo Latour and Gianvittorio Rizzano</i>
15:15	<b>Nonlinear Dynamic Analysis of Structures Equipped with Shear Links by NextFEM Designer®</b> <i>Ciro Napolitano, Nicolò Vaiana, Julian Mauricio Londono Monsalve and Luciano Rosati</i>
15:30	<b>Simplified numerical model reproducing the nonlinear behavior of a knee bracing system equipped with a dissipative fuse</b> <i>Riccardo Piazzon, Paolo Zampieri, Federico Gusella and Carlo Pellegrino</i>
15:45	<b>Experimental study on the mechanical behavior and the feasibility of monitoring of building frames with steel knee brace</b> <i>Haruna Hiromatsu, Riku Fujie, Natsuhiko Sakiyama, Haoda Teng, Yuki Jin and Takumi Ito</i>
16:00	<b>Strongback Braced Frames for Damage Protection of Earthquake Resistant Buildings</b> <i>Lucia Tirca and Lizhu Chen</i>
16:15	-

## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 7B - Room D Performance of structural members Chairs: Raffaele Landolfo and Kazuya Mitsui
14:45	<b>Structural Performance Evaluation of Shallow H-shaped Steel Beam-Column under Combined Loading</b> <i>Atsushi Sato and Soya Nakatsuka</i>
15:00	<b>Experimental investigation of cyclic loading performance of stubby steel braces</b> <i>Ryota Matsui, Yoshihiro Abe, Ibrahim Abiodun Raheem, Naoki Sadanaga, Ilanildo Dias and Taichiro Okazaki</i>
15:15	<b>Preliminary assessment of biaxial bending effects on the deformation capacity of steel tubular members</b> <i>Elisa Cerqueira, Cyrus Eshaghi, Rita Peres and José Miguel Castro</i>
15:30	<b>Parametric study on blind bolted rectangular CFST to steel beam connection including combined stiffeners</b> <i>Imed Bennoui, Idriss Rouaz, Sid Ali Raza and Rachid Bentafat</i>
15:45	<b>Finite Element Study of Seismic Compactness Limits for Tubular Columns in Seismic Frames</b> <i>Laura Constain Montoya, Omar Sediek, Tung-Yu Wu, Jason McCormick, Chia-Ming Uang, Sherif El-Tawil and Chung-Che Chou</i>
16:00	<b>Effect of Amplitude of Cyclic Loading on the Collapse Modes of I-shaped Beams with Local Buckling</b> <i>Koshiro Mori, Kikuo Ikarashi and Kazuya Mitsui</i>
16:15	<b>Cyclic Behavior of Wide-Flange Steel Columns with Reduced Sections</b> <i>Shayan Safaei, Mario D'Aniello and Raffaele Landolfo</i>

## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 7C - Room F Behaviour of aluminium and steel structures Chairs: Antonio Formisano and Guo-Qiang Li
14:45	<b>Numerical investigation of an LVL-aluminium hybrid beam</b> <i>Themistoklis Tsalkatidis and Qile Wang</i>
15:00	<b>Numerical studies on innovative pre-stressed aluminium alloy profiles for curtain wall systems</b> <i>Antonio Formisano and Muhammad Tayyab Naqash</i>
15:15	<b>Seismic Performance of Fire-Resistant Steel Welded Box-Section Columns</b> <i>Yan-Bo Wang, Siyi Xu, Letian Hai and Guo-Qiang Li</i>
15:30	<b>Aluminium Square Hollow Sections Under Cyclic Loading</b> <i>Rosario Montuori, Elide Nastri, Vincenzo Piluso, Alessandro Pisapia, Francesco Pisciotano and Paolo Todisco</i>
15:45	<b>Concept, design and construction of an aluminium alloy housing prototype in seismic zone</b> <i>Federico M. Mazzolani and Antonio Formisano</i>
16:00	<b>Experimental and FE Simulation of the Flexural Cyclic Behaviour of a Set of Concrete Filled Steel Tubes</b> <i>Rosario Montuori, Elide Nastri, Vincenzo Piluso and Paolo Todisco</i>
16:15	<b>A Comprehensive Study for Seismic Performance of Tall Steel Residential Buildings under Height Variations and Seismic Zones Effects</b> <i>Mohannad Abdo</i>

## CONFERENCE DAY 03 - Wednesday 10, July 2024

Time	Session 7D - Room G Steel connections V Chairs: Ahmed Elkady and Marco Simoncelli
14:45	<b>Seismic Performance Verification of Rapid-Disassembly Carbon-Minimized Dismantle connection</b> <i>Hyeongjin Choi, Sanghoon Kim, Youngju Kim, Jaehyeok Doh and Jaehoon Bae</i>
15:00	<b>Experimental study on seismic response of steel beam to SRC column connection</b> <i>Edgar Tapia-Hernández and Alejandro Santiago Flores</i>
15:15	<b>Stiffness of welded T-joints between SHS profiles and through plates</b> <i>Atsushi Sato, Giuseppe Elettore, Ali Ajwad, Sabatino Di Benedetto, Massimo Latour, Antonella Bianca Francavilla and Gianvittorio Rizzano</i>
15:30	<b>Experimental Study of Transversely Loaded Fillet Welds for Seismic Actions</b> <i>Shahab Ramhormozian, Mark Zhang, Charles Clifton, Michail Karpenko, Hafez Taheri, Zhan Chen and Pingsha Dong</i>
15:45	<b>Assessment of the Cyclic Behavior of Inter-Module Connections in Modular Steel Buildings</b> <i>Cyrus Eshaghi, Rita Peres and Jose Miguel Castro</i>
16:00	<b>Toughness of submerged arc weld metal and plastic deformation capacity of pre-assembled type beam-end connection using built-up H-shaped beam</b> <i>Tatsuya Nakano</i>
16:15	<b>An Empirical Spring Model for Simulating Bolt Fracture Considering Uncertainty</b> <i>Zizhou Ding and Ahmed Elkady</i>



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