

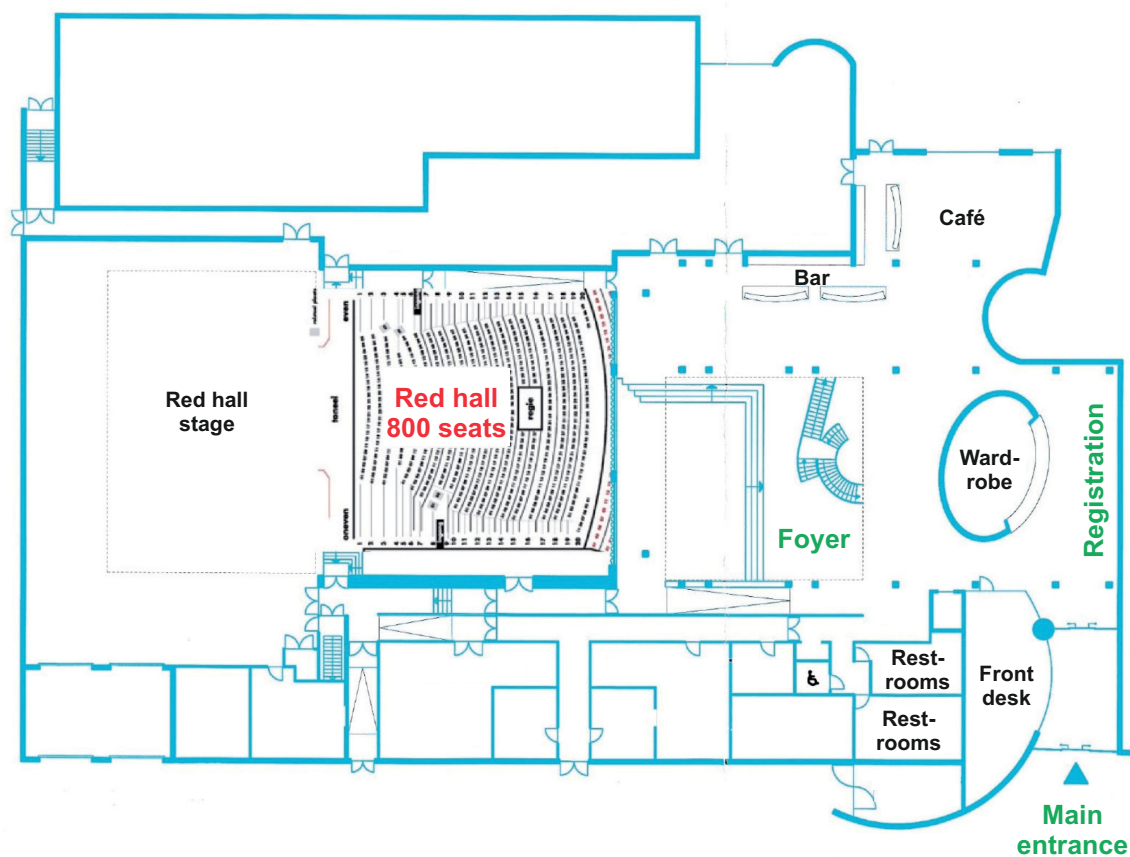
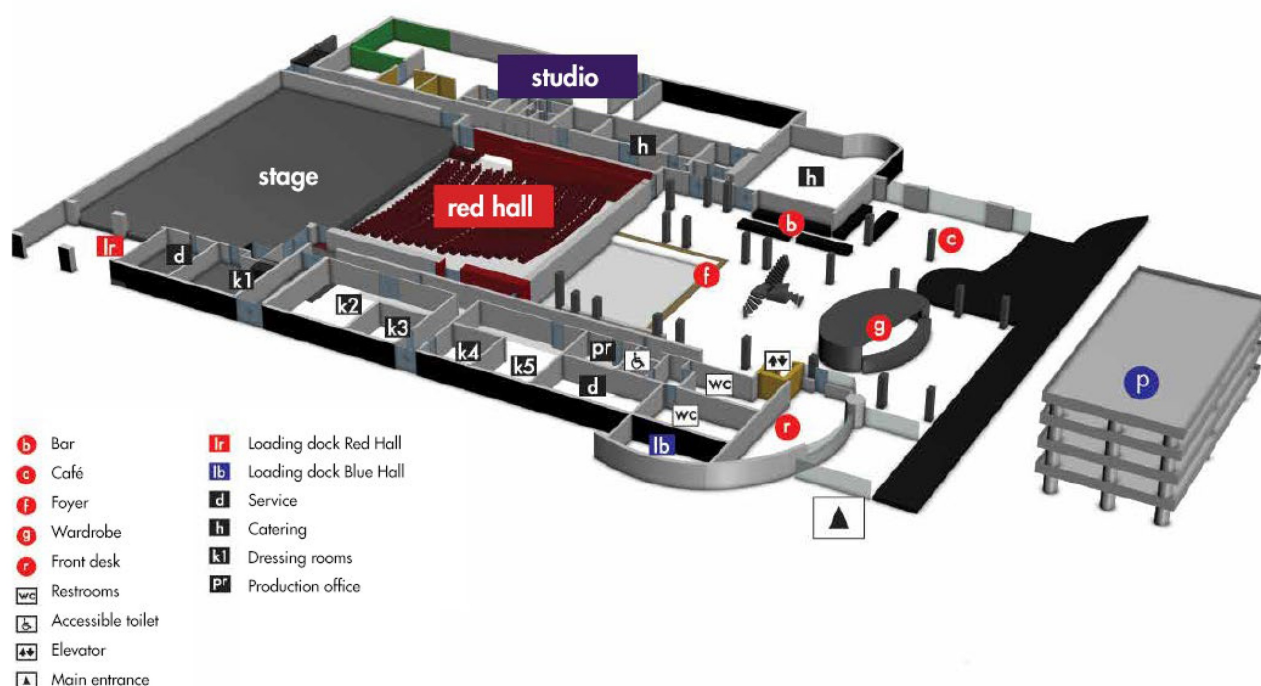
DAY 1

DAY 2

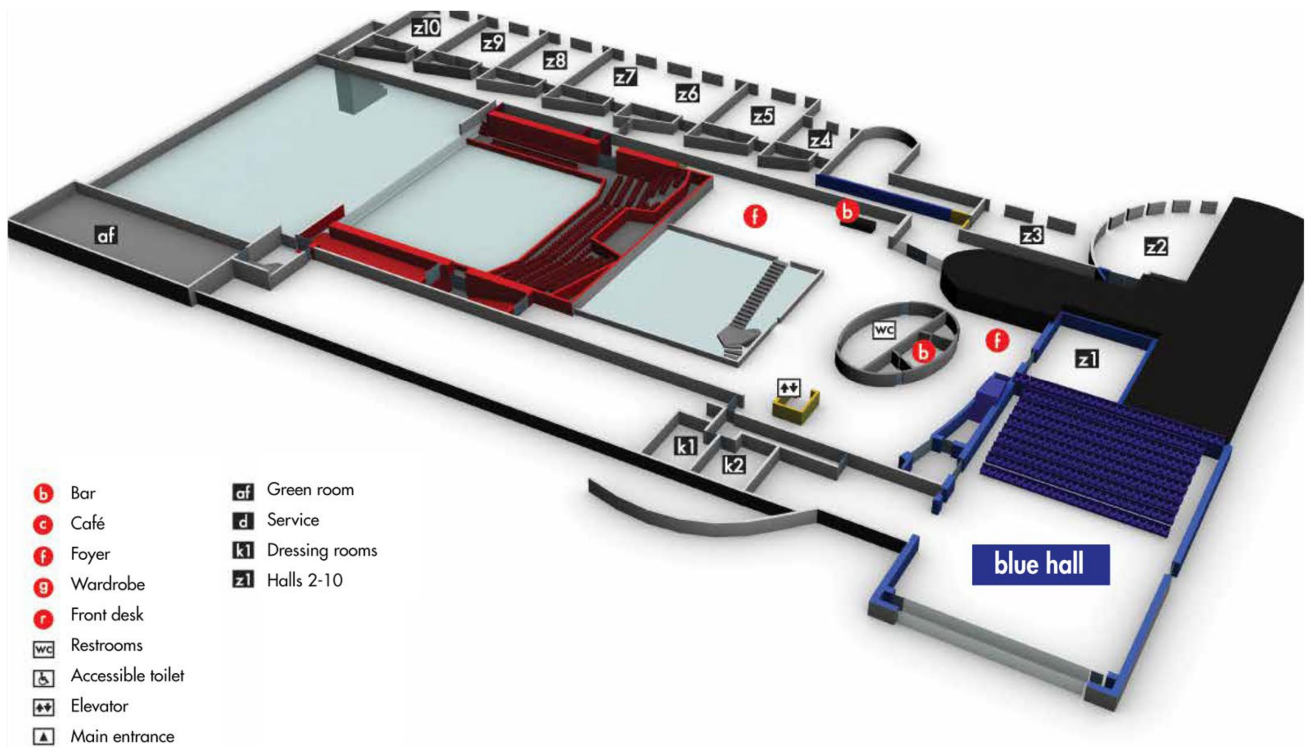
DAY 3

Time	Red Hall	Blue Hall	Room 1	Room 2	Room 3	Room 5	Room 6	Room 7	Room 8	Room 9	Room 10
08:30-09:00	Registration & Coffee										
09:00-10:00	Keynotes										
10:00-10:30	Coffee break (Foyer)										
10:30-12:30	Steel Composite Structures	Steel Composite Structures	Bolted Connections	Fatigue and fracture	3D printing and additive manufacturing	Stability of cross-sections, members and frames	Masts and towers, Offshore Structures	Eurocode and international design codes	Fire resistance and structural robustness	Seismic resistance, dynamics and vibration	Reuse and Retrofitting of Structural Element
12:30-14:00	Lunch (Foyer)										
14:00-16:00	Steel Composite Structures	Steel Composite Structures	Design for fast execution and disassembling	Fatigue and fracture	3D printing and additive manufacturing	Stability of cross-sections, members and frames	Masts and towers, Offshore Structures	Eurocode and international design codes	Fire resistance and structural robustness	Seismic resistance, dynamics and vibration	Reuse and Retrofitting of Structural Element
16:00-16:30	Coffee break (Foyer)										
16:30-17:30	Closing words										

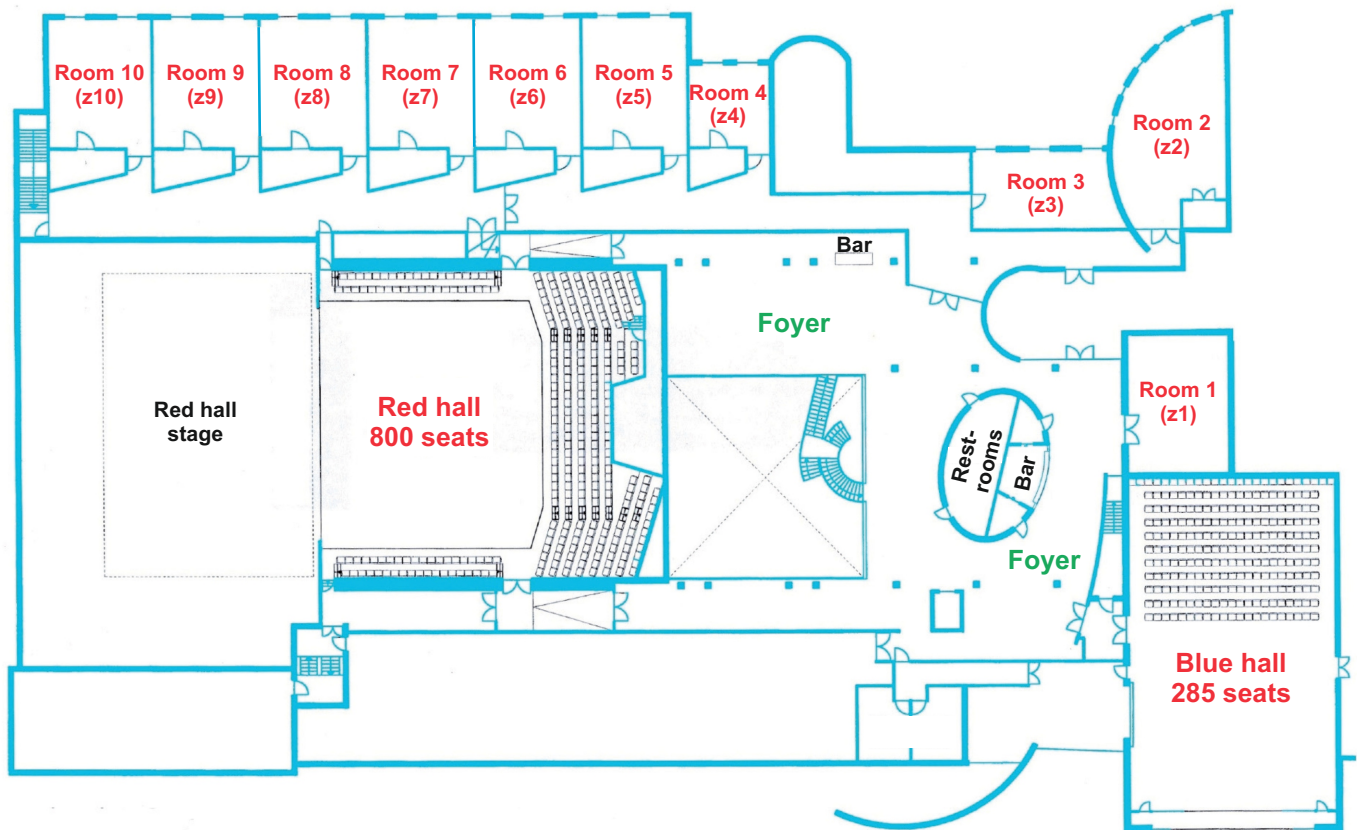
Ground floor



First floor



- b Bar
- c Café
- f Foyer
- g Wardrobe
- r Front desk
- wc Restrooms
- t Accessible toilet
- e Elevator
- A Main entrance
- af Green room
- d Service
- k1 Dressing rooms
- z1 Halls 2-10



EUROSTEEL 2023 - DAY 1

Keynote lectures | Red Hall | Day 1 - 9:30-10:30

Chairperson: TBD

Time	Title	Speaker
09:30-10:00	Keynote lecture Academic challenges for sustainable steel	Jacqueline Cramer
10:00-10:30	Keynote lecture Rethink the way we design buildings with less material and longer life cycle	Olivier Vassart

Keynote lecture & Panel discussion | Red Hall | Day 1 - 11:00-12:30

Chairperson: TBD

Time	Title	Speaker(s)
11:00-11:30	Keynote lecture Enabling re-use: stadium 974	Christoph Paech
11:30-12:30	Panel discussion Sustainable policy and research	Sameen Kahn, Johannes Kreißig, Torben Larsen

PARALLEL SESSION 1 (PS-1) - Day 1 - 13:30-15:00

PS-1a | Re-use of steel | Red Hall | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Introduction to the reuse of steel elements	Pim Peters	-
13:45-14:00	How does the NTA 8713 work - Reuse of steel elements in practice	Maarten Swinkels	-
14:00-14:15	Determination of actual material properties in existing structures using small specimens	Cécilia Braendstrup	van Es, Sjors; Braendstrup, Cécilia; Slot, Henk; Seinen, Jeroen; Dekker, Richard
14:15-14:30	Design fundamentals of demountable steel structures: from materials to members	Junwei Fan	Fan, Junwei; Yang, Lu; Liu, Meiyu
14:30-14:45	Practical examples of building dismantling	Menno Rubens	-
14:45-15:00	Discussion moderated by the chairperson		

PS-1b | Steel Composite Structures | Blue Hall | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	On the load-carrying behaviour of CSTC slim-floor beams	Robert Kroyer	Kroyer, Robert; Vigneri, Valentino; Taras, Andreas
13:45-14:00	Load transfer of circular reinforced composite dowel connector: a comparison of existing analytical equations	Maxence Paoletti	Paoletti, Maxence; Schäfer, Markus
14:00-14:15	Bending resistance of steel-timber composite (STC) beams: analytical vs. numerical investigations	Alfredo Romero Guzman	Romero, Alfredo; Yang, Jie; Odenbreit, Christoph
14:15-14:30	Four-point bending test of Composite beam with Concrete-GFRP cross-section	Michala Weissová	Weissová, Michala; Kvočák, Vincent; Dubecký, Daniel; Vanova, Patricia
14:30-14:45	High-Performance Pre-engineered Steel-Concrete Composite Beams for Sustainable Construction – Mechanical Behaviour of the Full-Scale Beams	Ming-Shan Zhao / Katherine A. Cashell	Zhao, Ming-Shan; Chua, Guan-Feng; Ding, Miao; Chiew, Sing-Ping; Yang, Yi; Cong, Zhengxia; Ng, Yaw Heong
14:45-15:00	Experimental tests of a modular composite frame corner for integral abutment bridges with sheet-piling foundations	Nils Rittich	Rittich, Nils; Wolters, Kevin; Nonn, Jonas; Feldmann, Markus; Ivanov, Stoyan; Tibolt, Mike

PARALLEL SESSION 1 (PS-1) - Day 1 - 13:30-15:00

PS-1c | Bolted Connections | Room 1 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Experimental comparison between threaded-bars and single-bolts end plate asymmetrical steel joints	Alfonso Loureiro	Loureiro, Alfonso; Lopez, Manuel; Gutierrez, Ruth; Reinos, Jose Manuel
13:45-14:00	Preloaded bolted connections with duroplastic gap filling materials	Philipp Werner	Makevicius, Lukas; Stranghöner, Natalie; Korbaj, Anas; Werner, Philipp; Kunde, Carsten; Thelen, Sebastian
14:00-14:15	Damage evaluation of steel frame subjected to impact load at midspan	Ying Chen	Chen, Ying
14:15-14:30	Evaluation of Existing Methods for Predicting Tension Resistance of Gusset Plates with Short Edge Distances	Yi-Seop Shin	Shin, Yi-Seop; Kim, Hyung-Joon
14:30-14:45	Numerical Investigation of a Sustainable Composite Connection	Themistoklis Tsalkatidis	Tsalkatidis, Themistoklis; Rath, Lars Christoffer Haug
14:45-15:00	Investigations into the yield-controlled tightening method for steel constructions	Denis Paluska	Stranghoener, Natalie; Paluska, Denis; Jungbluth, Dominik; Schaumann, Peter; Schierl, Christopher

PS-1d | Machine learning in engineering design and construction | Room 2 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Machine learning models for the ultimate strength of steel beams – influence of bending moment diagram	Paulo Vila Real	Couto, Carlos; Vila Real, Paulo
13:45-14:00	Probability of detection curve for the automatic visual inspection of steel bridges	Andrii Kompanets	Kompanets, Andrii; Leonetti, Davide; Duits, Remco; Maljaars, Johan; Snijder, Bert
14:00-14:15	Latent space exploration an predictive modelling of steel profile overstrength factors using conditional Variational Autoencoders	Michael Kraus	Kraus, Michael; Müller, Andreas; Bischof, Rafael; Taras, Andreas
14:15-14:30	Deep Neural Network Directs Stiffness Method: Fundamental Steps into Beam Design	Andreas Müller	Müller, Andreas; Taras, Andreas
14:30-14:45	Shear connector design using data analytics approaches	Hannah Blum	Koh, Hyeyoung; Blum, Hannah
14:45-15:00			

PS-1e | Stability and Plasticity in plates and shells | Room 3 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Numerical study on the effect of longitudinal stiffeners ending within the buckling field	Immo Lukas	Lukas, Immo; Timmers, Ralph; Lang, Robert
13:45-14:00	A MATLAB finite element toolbox for the efficient nonlinear analysis of axisymmetric shells	Achilleas Filippidis	Filippidis, Achilleas; Sadowski, Adam
14:00-14:15	Stress increases in crane runway girders due to rail joints	Markus Kettler	Kettler, Markus; Unterweger, Harald
14:15-14:30	Investigation on shear buckling of steel welded I-section beams with reinforced web openings	Jian Wang	Wang, Jian; Li, Zheng; Euler, Mathias
14:30-14:45	Experiment-based statistical distribution of buckling loads of cylindrical shells	Zheng Li	Li, Zheng
14:45-15:00	Load capacity of penstock manifolds subjected to increasing settlements at the vertical supports	Martin Langwieser	Langwieser, Martin; Ecker, Alexander; Unterweger, Harald

PARALLEL SESSION 1 (PS-1) - Day 1 - 13:30-15:00

PS-1f | Stability of cross-sections, members and frames | Room 5 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Linear elastic buckling of composite beams – An analytical engineering approach	Johannes Derks	Derks, Johannes
13:45-14:00	GMNIA-based design of stainless steel structural systems	Fiona Walport	Walport, Fiona; Chan, Hou Un; Gardner, Leroy; Nethercot, David
14:00-14:15	The plastic deformation capacity of the structural system for thin-web steel beam reinforced with stiffener plates	Masashi Nitawaki	Nitawaki, Masashi; Ishii, Daigo
14:15-14:30	Lateral-Torsional Buckling of welded I-members with flame-cut flanges: Experimental and numerical studies	Maxime Lebastard	Lebastard, Maxime; Couchaux, Maël; Bureau, Alain; Hjjaj, Mohammed
14:30-14:45	Out-of-plane flexural buckling design resistance of welded I-members made of flame-cut flanges	Maxime Lebastard	Lebastard, Maxime; Couchaux, Maël; Bureau, Alain; Hjjaj, Mohammed
14:45-15:00	Algorithm for the plastic analysis of arbitrary steel cross sections based on finite element formulations	Stalin Ibáñez	Ibanez, Stalin; Kraus, Matthias

PS-1g | Cold-formed Structures | Room 6 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	An experimental investigation into span length effect in composite CFS and timber-based flooring systems	Samar Raffoul	Raffoul, Samar; Sun, Yao; McCrum, Daniel
13:45-14:00	Prediction of the cyclic rotation capacity of steel members with cold-formed hollow cross-section	Marco Caragliano	Bosco, Melina; Caragliano, Marco; D'Aniello, Mario; Landolfo, Raffaele; Rossi, Pier Paolo
14:00-14:15	Effective Modulus Method (EMM) concept applied to thin-walled steel columns.	Luis Prola	Prola, Luis; Gala, Pedro; Ruben, Rui; Monteiro, Cristiano; Simões, Ana
14:15-14:30	Uncertainties in the structural design of the high-bay cold storage warehouses	Annabella Sánduly	Sánduly, Annabella; Kelemen, Andrea; Nagy, Zsolt
14:30-14:45	Slotted lightweight steel sections for thermal improvement of building envelopes	Gesa Pauli	Pauli, Gesa; Kuhnhenne, Markus
14:45-15:00			

PS-1h | Novel structural solutions | Room 7 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Testing of a Novel Induction Heat Treated Steel Brace with Enhanced Buckling Behaviour	Shadiya Jamshiyas	Jamshiyas, Shadiya; Skalomenos, Konstantinos
13:45-14:00	Resilience assessment of a two-storey steel structure equipped with innovative connections	Elena Elettore	Elettore, Elena; Freddi, Fabio; Latour, Massimo; Piluso, Vincenzo; Rizzano, Gianvittorio
14:00-14:15	Experimental test setup design for ultimate limit state evaluation of ductile wrapped composite KK-joints	Mattieu Koetsier	Koetsier, Mathieu; de Vries, Peter; Peeters, Tjeu; Pavlovic, Marko
14:15-14:30	Experimental investigation of wrapped composite X-joints under uniaxial and multi-axial loading conditions	Mattieu Koetsier	Koetsier, Mathieu; Yang, Jincheng; Wolters, Mees; van Leengoed, Berend; Pavlovic, Marko
14:30-14:45	Novel bolted steel joint to improve anti-collapse resistance of steel structure	Aleksander Kozłowski	Kozłowski, Aleksander; Kukla, Damian
14:45-15:00	Innovations for Bolted RHS Column Splices	Jeffrey Packer	Packer, Jeffrey

PARALLEL SESSION 1 (PS-1) - Day 1 - 13:30-15:00

PS-1i | Novel structural solutions | Room 8 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Novel Hybrid Modular Construction System - Structural Behaviour of Isolated Sub-Frames	Nemanja Milovanovic	Milovanovic, Nemanja; Simões, Rui; Tankova, Trayana; Carlos Silva, Luis; Craveiro, Helder; Costa, Ricardo; Simoes da Silva, Luis
13:45-14:00	Improving the behavior of semi-supported steel plate shear walls using diagonal stiffeners	Georgios Ilia	Kontoni, Denise-Penelope; Ghamari, Ali; Poor Omid, Mohamad Saeid; Ilia, Georgios
14:00-14:15	An innovative I-shaped low-yield steel shear damper directly connected to the concentrically braced frame	Georgios Ilia	Kontoni, Denise-Penelope; Ghamari, Ali; Kheiri, Javad; Ilia, Georgios
14:15-14:30	Web crippling behaviour and design of aluminium SupaCee sections	Kajaharan Thirunavukkarasu	Thrunavukkarasu, Kajaharan; Alsanat, Husam; Poologanathan, Keerthan; Shanmuganathan, Gunalan; Perampalam, Gatheeshgar; Kanthasamy, Elilarasi; Higgins, Craig
14:30-14:45	Memory-Steel for Smart Steel Structures: A Review on Recent Developments and Applications	Elyas Ghafoori	Ghafoori, Elyas; Wang, Sizhe; Mohri, Maryam; Li, Lingzhen; Izadi, Mohammadreza; Jafarabadi, Ali; Pichler, Niels
14:45-15:00			

PS-1j | Sustainability Assessment and design | Room 9 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Enhancing Energy Efficiency of Cold-formed Steel Framed Walls with Vacuum Insulation Panels	Rajanayagam Heshachanaa	Rajanayagam, Heshachanaa; Upasiri, Irindu; Poologanathan, Keerthan; Perampalam, Gatheeshgar; Nagaratnam, Brabha; Kanthasamy, Elilarasi
13:45-14:00	Decarbonisation of steel production by the low-carbon DRI-EAF route	Helena Gervásio	Gervasio, Helena; Simoes da Silva, Luis
14:00-14:15	Life-Cycle-Assessment of a wildlife bridge: influence of the structural design on the carbon emissions	José Humberto Matias de Paula Filho	Matias de Paula Filho, José Humberto; Zanon, Riccardo; Glorieux, Antoine
14:15-14:30	Economic and environmental assessment of high-strength steel grades	Loris Saufnay	Saufnay, Loris; Demonceau, Jean-François
14:30-14:45	Life Cycle Cost and Life Cycle Assessment of Composite Bridge with Flat and Corrugated Webs	Fatima Hlal	Hlal, Fatima; Amani, Mozdeh; Nilsson, Peter; Hollberg, Alexander; Al-Emrani, Mohammad
14:45-15:00			

PS-1k | Welded Joints and Connections | Room 10 | Day 1 - 13:30-15:00

Chairperson: TBD

Time	Title	Speaker	Authors
13:30-13:45	Investigations on the material behaviour of weld seams for the use in finite element analyses	Ina Kuntsche	Kuntsche, Ina; Lange, Jörg
13:45-14:00	Experimental Research on Welded Aluminium X Joints	Semso Kalac	Kalač, Šemso; Radlbeck, Christina; Mensinger, Martin; Lucic, Dusko
14:00-14:15	Influence of semi-rigid joints on the seismic performance of single-storey steel frames	Greta Agata Venneri	Veneri, Greta; De Matteis, Gianfranco; Brando, Giuseppe
14:15-14:30	I-beam-to-SHS column moment resisting joints using passing-through plates under equal bending moments: numerical and analytical studies	Mouad Madhouni	Madhouni, Mouad; Couchaux, Maël; Hjiat, Mohammed; Kanyilmaz, Alper
14:30-14:45	I-beam-to-SHS column moment resisting joints using passing-through plates under opposite bending moments: numerical and analytical studies	Mouad Madhouni	Madhouni, Mouad; Couchaux, Maël; HJIAT, Mohammed; Kanyilmaz, Alper
14:45-15:00	Study on load-carrying capacity of MAG butt-welded mixed connections with different steel strengths	Mareike von Arnim	von Arnim, Mareike; Eichler, Stefan; Brätz, Oliver; Hildebrand, Jörg; Kuhlmann, Ulrike; Bergmann, Jean Pierre; Flügge, Wilko

PARALLEL SESSION 2 (PS-2) - Day 1 - 15:30-17:00

PS-2a | Impact of new Eurocodes | Red Hall | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	TBA		
15:45-16:00	TBA		
16:00-16:15	TBA		
16:15-16:30	TBA		
16:30-16:45	TBA		
16:45-17:00	TBA		

PS-2b | Steel Composite Structures | Blue Hall | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Experimental investigations on composite columns: round hollow sections with embedded solid core section made of high-strength steel	Jonas Nonn	Nonn, Jonas; Janiak, Till; Wolters, Kevin; Rittich, Nils; Feldmann, Markus
15:45-16:00	Feasibility study on stub and slender veneer-wrapped steel columns	Valentino Vigneri	Vigneri, Valentino; Taras, Andreas
16:00-16:15	Feasibility study on an optical strain gage Based on Fluorescence Response of Graphene Quantum Dots	Krishna Murari	Liu, Haitao; Yang, Bo; Chen, Kang
16:15-16:30	Analytical investigations of seismic performance of different joint details for composite RCS frames	Krishna Murari	Murari, Krishna; Kumar, P. C. Ashwin; Shiradhonkar, Saurabh
16:30-16:45	Investigations of the shear connectors and the load-bearing behaviour of steel cross-laminated timber composite beams	Noah Böhm	Böhm, Noah; Kühn, Bertram; Vogelsberg, Achim
16:45-17:00	Determination of overall factor for the application of the General Method based on plastic and strain-limited N-M-Interaction for composite compression members	Pëllumb Zogu	Zogu, Pellumb; Schäfer, Markus

PS-2c | Bolted Connections | Room 1 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Numerical study on behaviour of T-stubs with bolts in tapped holes	Marko Ptiček	Ptiček, Marko; Skejić, Davor; Latour, Massimo; Rizzano, Gianvittorio
15:45-16:00	Block shear strength of high strength steel staggered bolted connections	Xuemei Lin	Lin, Xue-Mei; Yam, Michael C.H.; Chung, Kwok-Fai; Song, Yuchen
16:00-16:15	Stiffness of L-stubs loaded in compression	Lynita Sarou	Sarou, Lynita; Couchaux, Maël; Hjjaj, Mohammed; SIRE, Stéphane; Douroux, Jean-François
16:15-16:30	Modelling of column base plate connections with plate stiffeners and non-proportional loading	Gaetano Della Corte	Della Corte, Gaetano; Cantisani, Gaetano
16:30-16:45	I-beam to RHS-column joints with welded studs under cyclic loading	Carlos López-Colina	García García, Ismael; López-Colina, Carlos; Serrano López, Miguel Ángel; Wang, Yong
16:45-17:00	Full-Scale Composite Moment-Resisting Frame with Dissipative Bolted Connections under Monotonic Loads: Experimental versus Numerical Results	Rafaela-Florina Don	Don, Rafaela; Balaskas, Georgios; Vulcu, Cristian; Hoffmeister, Benno

PARALLEL SESSION 2 (PS-2) - Day 1 - 15:30-17:00

PS-2d | Machine learning in engineering design and construction | Room 2 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Reliability assessment of steel-framed industrial buildings using GAN to generate augmented samples	Luís Simões da Silva	Simoes da Silva, Luis; Ljubinkovic, Filip; Janković, Milena; Gervasio, Helena; Conde, Jorge; Silva, Catarina; Tankova, Trayana
15:45-16:00	Application of machine learning approaches for modelling crack growth rates	Mohamed El Amine Ben Seghier	Ben Seghier, Mohamed El Amine
16:00-16:15	Predicting Flush End Plate Connections Response Using Artificial Neural Networks	Ahmed Elkady	Design for fast execution and disassembling
16:15-16:30	Machine learning-based predictions of buckling behaviour of cold-formed steel structural elements	Iman Hajirasouliha	Mojtabaei, Seyed Mohammad; Becque, Jurgen; Khandan, Rasoul; Hajirasouliha, Iman
16:30-16:45	A framework for multi-element hybrid simulation of steel braced frames using model updating	Anahita Hosseini	Hosseini, Anahita Sadat; Mokhtari, Fardad; Imanpour, Ali
16:45-17:00			

PS-2e | Stability and Plasticity in plates and shells | Room 3 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Shear Buckling Behavior of Tapered Steel Plate Girders with Sinusoidally Corrugated Webs	Jian Wang	Wang, Jian; Li, Zheng; Pasternak, Hartmut; Euler, Mathias
15:45-16:00	Imperfection Sensitivity of Plastic Shear Buckling Behaviour in Stainless Steel Girders with Corrugated Webs	Mozhdeh Amani	Amani, Mozhdeh; Al-Emrani, Mohammad; Khalili, Shahriar
16:00-16:15	Buckling resistance of stiffened panels subjected to constant transverse compression stresses	Vahid Pourostad	Pourostad, Vahid; Kuhlmann, Ulrike
16:15-16:30	Sandwich Panels as Building Envelope under In-Plane Deformation: Experimental Program and Monotonic / Cyclic Response	Lara Bittner	Bittner, Lara; Vulcu, Cristian; Hoffmeister, Benno
16:30-16:45	Insights into the occurrence of transverse bending stresses in web plates of crane runway girders	Paul Zauchner	Zauchner, Paul; Kettler, Markus; Unterweger, Harald
16:45-17:00	An analytical design approach for outstand steel plates in compression	Jurgen Becque	Becque, Jurgen

PS-2f | Stability of cross-sections, members and frames | Room 5 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Study on Global Imperfection of Modular integrated Construction Structures for Second-order Analysis	Yueyang Ding	Ding, Yueyang; Liu, Si-Wei; Liu, Yao-Peng; Chen, Wen-Feng; Chan, Siu-Lai
15:45-16:00	Strain-hardening dependent cross-sectional slenderness limits for the elastic resistance of steel beams	Patrick Studer	Studer, Patrick; Taras, Andreas
16:00-16:15	Local buckling behaviour of high strength steel tubular beams under moment gradients	Zichang Yang	Yang, Zichang; Meng, Xin; Walport, Fiona; Gardner, Leroy
16:15-16:30	Lateral-torsional buckling of beams made of monosymmetrical thin-walled sections	Maxime Vermeylen	Vermeylen, Maxime; Bezas, Marios-Zois; Crispin, Mathieu; Jaspert, Jean-Pierre; Demonceau, Jean-François
16:30-16:45	Equivalent global sway imperfections for use in design by GMNIA	Hu Chan	Chan, Hou Un; Walport, Fiona; Gardner, Leroy
16:45-17:00	Influence of flanges on the elastic buckling strengths of horizontally curved steel I-girders	Aanandh Nandakumar	Nandakumar, Aanandh; Subramanian, Lakshmi

PARALLEL SESSION 2 (PS-2) - Day 1 - 15:30-17:00

PS-2g | Cold-formed Structures | Room 6 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Novel method for the prediction of load bearing capacity of compressed C channels considering interaction of buckling modes	Bálint Vaszilievits-Sömjén	Vaszilievits-Somjen, Balint; Papp, Ferenc
15:45-16:00	Lateral-torsional buckling experiments of built-up section CFS beams	Kim Rasmussen	Ma, Di; Rasmussen, Kim; Zhang, Hao
16:00-16:15	Proposal for determination of wind action on steel rack supported warehouses during execution	José Henriques	Henriques, José; Marra, Antonino; Van Vugt, Glenn; Bartoli, Gianni; Degée, Hervé
16:15-16:30	Performance evaluation of cold-formed steel spot weld connections	Andrea Rajić	Rajić, Andrea; Lukačević, Ivan; Čurković, Ivan; Žuvelek, Vlaho
16:30-16:45	Structural Behaviour of Built-Up Battered Cold-Formed Steel Columns	Hélder David da Silva Craveiro	Craveiro, Helder; Rahnavard, Rohola; Santiago, Aldina; Laím, Luís; Simões, Rui
16:45-17:00			

PS-2h | High-strength, stainless and other special steels | Room 7 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Monotonic and cyclic behaviour of 6082-T6 aluminium alloy	Evangelia Georgantzia	Georgantzia, Evangelia; Kashani, Mohammad Mehdi
15:45-16:00	Material characterisation tests of ultra-high-strength steels S960QL and S1100M under natural fire conditions	Sara Uszball	Uszball, Sara; Knobloch, Markus
16:00-16:15	Design optimisation of welded I-beams made of high strength steels	Loris Saufnay	Saufnay, Loris; Renotte, Tom; Mahieu, Ludovic; Demonceau, Jean-François
16:15-16:30	Experimental behaviour of cold-formed stainless steel cruciform section columns	Jelena Dobrić	Dobrić, Jelena; Fric, Nenad; Naraidoo, Elenor; Rossi, Barbara
16:30-16:45	Geometric imperfection measurement on welded hybrid steel box section girders	Balázs Somodi	Somodi, Balázs; Wassfee, Alani Dhiaa; Kövesdi, Balázs
16:45-17:00			

PS-2i | Novel structural solutions | Room 8 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Seismic assessment of the steel Moment Resisting Frame equipped with friction beam-to-column joints	Mario D'Aniello	Poursadrollah, Arash; D'Aniello, Mario; Tartaglia, Roberto; Landolfo, Raffaele
15:45-16:00	Design to manufacture of fully stressed curved structures through elastic deformation of thin steel sheets with interlocking connections	Seyed Mobin Moussavi	Mobin, Moussavi; Lienhard, Julian; Liu, Dongyuan
16:00-16:15	Optimisation methods for the design of advanced metal seismic dissipation devices manufactured via 3d printing	Francesca Romana Andreacola	Andreacola, Francesca Romana; Brando, Giuseppe
16:15-16:30	Experimental and numerical study of a damage-free self-centring for seismic resilient EBFs	Massimo Latour	Lettieri, Annarosa; Freddi, Fabio; Latour, Massimo
16:30-16:45	Structural Steel Fabrication with Mixed Reality	Hannah Blum	Blum, Hannah; Kraus, William
16:45-17:00			

PARALLEL SESSION 2 (PS-2) - Day 1 - 15:30-17:00

PS-2j | Sustainability Assessment and design | Room 9 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Numerical investigation of lateral behaviour of steel-timber hybrid frames	Dan Bompa	Offerman, Tom; Bompa, Dan
15:45-16:00	Probabilistic design life selection procedure for a steel bridge	Egor Svechnikov	Svechnikov, Egor; Maljaars, Johan; Snijder, Bert; de Boon, Johan; Drenth, Eize
16:00-16:15	Life-Cycle-Assessment of purlin systems: the influence of the low carbon high strength steels in CO ₂ eq. emissions	José Humberto Matias de Paula Filho	Matias de Paula Filho, José Humberto; Guimarães Ribeiro, Leonardo; Guth, Jérôme; Marioni, Luca
16:15-16:30	The INCSEB project: low carbon steel envelope systems	Thibault Renaux	Prudor, Valerie; Izabel, David; Renaux, Thibault
16:30-16:45	Assessment of Embodied Carbon in a Tied-Arch Bridge	Burak Karabulut	Ruck, Natalie; Naraiddoo, Elenor; Liu, Chengying; Kamali, Mohammadreza; Karabulut, Burak; Rossi, Barbara
16:45-17:00			

PS-2k | Welded Joints and Connections | Room 10 | Day 1 - 15:30-17:00

Chairperson: TBD

Time	Title	Speaker	Authors
15:30-15:45	Innovative one-way connections between I-beams and CHS columns	Rajarshi Das	Das, Rajarshi; Kanyilmaz, Alper; Madhouni, Mouad; Degee, Herve
15:45-16:00	Hysteretic behaviour of welded connections with highly inelastic panel zones	Andronikos Skiadopoulos	Skiadopoulos, Andronikos; Lignos, Dimitrios; Arita, Masaki; Hiroshima, Satoru
16:00-16:15	Tensile behaviour of welded S700 rectangular hollow section X-joints	Hagar El Bamby	Yan, Rui; Elbamby, Hagar; Veljkovic, Milan
16:15-16:30	Cyclic behaviour of 3D cut welded connections with CHS columns and through I-beams	Sabatino Di Benedetto	Di Benedetto, Sabatino; Latour, Massimo; Francavilla, Antonella Bianca; Rizzano, Gianvittorio
16:30-16:45	Developed numerical Analysis of Residual Stress caused by Welding and Cutting in Steel Structures	Zheng Li	Li, Zheng
16:45-17:00	Flexural resistance of 3D cut welded joints between SHS columns and through I-beams	Gianvittorio Rizzano	Sato, Atsushi; Latour, Massimo; de la Pena, Amparo; Di Benedetto, Sabatino; Francavilla, Antonella Bianca; Rizzano, Gianvittorio

ECCS Awards | Red Hall | Day 1 - 17:00-18:00

Chairperson: TBD

EUROSTEEL 2023 - DAY 2

Keynote lectures | Red Hall | Day 2 - 9:00-10:00

Chairperson: TBD

Time	Title	Speaker
09:00-09:30	Keynote lecture Steel and composite bridges – Enabling sustainable solutions	Ulrike Kuhlmann
09:30-10:00	Keynote lecture Recent progress in computational predictions on fatigue and fracture resistance of steel connection joints	Haohui Xin

PARALLEL SESSION 3 (PS-3) - Day 2 - 10:30-12:30

PS-3a | Bolted Connections | Red Hall | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Experimental Investigations on load-bearing Capacity and characteristic Preload of Lockstud systems	Melanie Hagemann	Hagemann, Melanie; Schwarz, Mathias; Glienke, Ralf; Schwerdt, Daniela; Henkel, Knuth-Michael
10:45-11:00	A generalised mechanical model for the characterisation of steel joints	Tudor Golea	Golea, Tudor; Bodson, Romain; de Ville de Goyet, Vincent; Jaspard, Jean-Pierre; Demonceau, Jean-François
11:00-11:15	Use of adhesives in preloaded bolted connections for hot-dip galvanised constructions	Justus Mantik	Mantik, Justus; Glienke, Ralf; Denkert, Christian; Dörre, Maik; Vallée, Till; Fricke, Holger; Henkel, Knuth-Michael
11:15-11:30	Numerical analysis of the component column web in tension with additional plates: stiffness evaluation.	Manuel Lopez Lopez	Lopez Lopez, Manuel; Loureiro, Alfonso; Gutierrez, Ruth; Reinos, Jose Manuel
11:30-11:45	Further development of detail categories for bolt-assemblies subjected to normal stress in steel constructions	Mathias Schwarz	Glienke, Ralf; Schwarz, Mathias; Hagemann, Melanie; Seidel, Marc; Dörre, Maik
11:45-12:00	Seismic characterisation of aluminium fusible links in single-storey steel buildings	Sara Pasquali	Pasquali, Sara; Tondini, Nicola; Zanon, Gabriele
12:00-12:15	Accuracy assessment of predictive models for semi-rigid extended end-plate connections	Zizhou Ding	Ding, Zizhou; Elkady, Ahmed
12:15-12:30	Elastic behavior of riveted double angle connections in tension	Lynita Sarou	Sarou, Lynita; Couchaux, Maël; Hjjaj, Mohammed; SIRE, Stéphane; Douroux, Jean-François

PS-3b | Steel Composite Structures | Blue Hall | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Effects of section slenderness and concrete strength on the cross-sectional behaviour of lightweight concrete-filled cold-formed built-up box sections	Yie Sue Chua	Teoh, Keat Bin; Chua, Yie Sue
10:45-11:00	Investigations on the system reliability of composite beams by transferring brittle and ductile Daniels systems to the shear connection	Kevin Wolters	Wolters, Kevin; Nonn, Jonas; Rittich, Nils; Feldmann, Markus
11:00-11:15	Development of Novel Inter-module Connection for Composite Modular Tall Buildings	Arjun Kandel	Kandel, Arjun; Thai, Huu-Tai; Ngo, Tuan
11:15-11:30	Finite Element Analysis on Flexural Bearing Performance of Innovative Closed Profiled Steel Sheeting-Concrete Composite Slab	Ding Lu	Lu, Ding; Shi, Yongjiu; Liu, Dong
11:30-11:45	Estimation of maximum admissible precambering of steel beams	Rui Matos	Matos, Rui; Candeias, Miguel; Craveiro, Helder
11:45-12:00	Bearing capacity of headed studs under combined tension and shear loading in composite beams with large web openings	Manuel Risch	Risch, Manuel; Kurz, Wolfgang; Wolters, Kevin; Janiak, Till; Christou, Georgios
12:00-12:15	Dynamics Steel-FRP bridge	Kees van IJselmuiden	van IJselmuiden, Kees; Cornelissen, Lieuwe; de Leur, Merijn; Schakel, Dennis; Christensson, Pontus; Schaik van, Rik
12:15-12:30			

PARALLEL SESSION 3 (PS-3) - Day 2 - 10:30-12:30

PS-3c | Fatigue and fracture | Room 2 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Fatigue improvement of rib-to-deck welded joints using adhesively bonded steel patches - LEFM-based parametric study	Xudong Wang	Wang, Xudong; Leonetti, Davide; Miao, Changqing; Snijder, H.H. (Bert)
10:45-11:00	Generic method of local thickening in shell element FEM models for orthotropic bridge decks	Jorrit Rodenburg	Rodenburg, Jorrit; Hengeveld, Sjoerd; Wijnbeld, Bas; Maljaars, Johan
11:00-11:15	Review of the damage equivalence factors for steel railway bridges in the Eurocodes	Stefan Martinolli	Martinolli, Stefan; Kroyer, Robert; Taras, Andreas
11:15-11:30	Fatigue behavior at flange thickness transitions with cope holes – design model for engineering practice	Christoph Derler	Derler, Christoph; Unterweger, Harald; Knobloch, Markus; Röscher, Stefanie
11:30-11:45	Miniature specimen tests and fracture model of heat affected zone material	Kim Rasmussen	Liu, Xiaofan; Yan, Shen; Rasmussen, Kim
11:45-12:00	Fatigue stress concentrations analysis of real corroded steel structures based on replica imprints	Mohammad Sulaiman Shojai	Shojai, Sulaiman; Schaumann, Peter; Momber, Andreas; Ghafoori, Elyas
12:00-12:15	Fatigue strength of the joint of steel cantilevers in composite bridges	Raphael Erlemann	Erlemann, Raphael; Kraus, Josef; Geissler, Karsten
12:15-12:30	Fatigue performance evaluation of stiffener-to-deck plate weld in orthotropic steel decks based on generative adversarial network	Bingfeng Liu	Liu, Bingfeng; Xin, Haohui; Liu, Jieli; Veljkovic, Milan

PS-3d | Stability and Plasticity in plates and shells | Room 3 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Linear buckling analysis in the design of triangular bracket plates	Martin Vild	Dowswell, Bo; Vild, Martin
10:45-11:00	Creation of design models of silos for grain storage under conditions of non-axisymmetric actions	Volodymyr Semko	Makhinko, Anton; Makhinko, Natalia; Semko, Volodymyr
11:00-11:15	Length and Boundary Condition Effects in the Buckling of Cylinders Under Different Load Combinations	Hussain Al-Lawati	AL-Lawati, Hussain
11:15-11:30	Numerical study on steel plate girders - Intermediate transverse stiffeners axial force	Sérgio Nascimento	Nascimento, Sérgio; Pedro, José Oliveira; Kuhlmann, Ulrike
11:30-11:45	Experimental Investigation on Buckling Behavior of soil-embedded Piles	Hagen Balscheit	Balscheit, Hagen; Victor, Albrecht; Thiele, Marc; Cuellar, Pablo; Baeßler, Matthias; Lüddecke, Falk
11:45-12:00	Analytical and numerical calculation of the buckling stress for panels with closed-section stiffeners	Primož Može	Piculin, Sara; Pourrostad, Vahid; Može, Primož; Kuhlmann, Ulrike
12:00-12:15	Plate and stiffener buckling in transversely loaded steel panels	Svein-Rune Kleppe	Kleppe, Svein-Rune; Aalberg, Arne
12:15-12:30	On the optimal shape and placement of longitudinal stiffeners in longitudinally stiffened plates	Ghaith Atef Aref Abu Reden	Abu Reden, Ghaith; Adany, Sandor

PS-3e | Bridge Construction and Structural Design | Room 5 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Opening gates in flood protection barriers along the North Sea Coast	Philippe van Bogaert	Van Bogaert, Philippe
10:45-11:00	Gerda Tora bridge - a semi integral composite bridge	Lieuwe Cornelissen	Cornelissen, Lieuwe; Hesselink, Bert; Boeters, Ton
11:00-11:15	Bulbs versus Trough decks	Ernst Klamer	Klamer, Ernst; Hesselink, Bert; Vollema, Nynke; Hiddingh, Jan; Wijnbeld, Bas
11:15-11:30	Distortion-induced fatigue failure at main girders of a railway bridge – efficiency of different reinforcements based on strain measurements	Harald Unterweger	Unterweger, Harald; Derler, Christoph
11:30-11:45	Orthotropic composite slabs for road bridges	Richard Stroetmann	Stroetmann, Richard; Wisniewski, Joachim; Mansperger, Tobias
11:45-12:00	Live Load Structural Index study on Small and Medium Span Steel-Concrete Composite Bridges	Zhihua Xiong	Xiong, Zhihua; Pan, Zhenhua; Mou, Xulin; Liu, Xuyao
12:00-12:15	Influence of Splice Plate on Mechanical Behavior of Steel Bridge Damaged by Collision	Eiki Yamaguchi	Yamaguchi, Eiki; Shiraishi, Kaito; Fujii, Natsuki
12:15-12:30	Investigations on the historical Széchenyi chain bridge	Balázs Kövesdi	Kövesdi, Balázs; Kollár, Dénes; Szabó, Bence; Dunai, László

PARALLEL SESSION 3 (PS-3) - Day 2 - 10:30-12:30

PS-3f | Cold-formed Structures | Room 6 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Structural analysis of rack upright frames under a pure compression load by means of a nonlinear Generalized Beam Theory analysis.	Jordi Bonada	Bonada, Jordi; Casafont, Miquel; Bové, Oriol; López, Ignasi
10:45-11:00	Shear Behaviour of Novel U-connector in CFS Truss-to-Column Connection	Lazar Lukačević	Lukačević, Lazar; Krolo, Paulina; Bakran, Antonio; Palijan, Ivan
11:00-11:15	Method for determining the cross-sectional resistance of transversely corrugated cold-formed steel arches under compression	Abdullah Maisari	Al-Maisari, Abdullah; Ma, Zhongcheng; Havula, Jarmo; Lu, Wei; Puttonen, Jari
11:15-11:30	Simplified nonlinear analysis of doubly corrugated cold-formed steel arches	Miquel Casafont	Casafont, Miquel; Bové, Oriol; Marimon, Frederic; Ferrer, Miquel; Soltanalipour, Milad
11:30-11:45	Experimental characterisation of connection behaviour for cold-formed steel panels sheathed with calcium silicate boards	Nikolaos Ringas	Ringas, Nikolas; Huang, Yuner
11:45-12:00	Influence of Profiled Faces on the Overall Shear Performance of Strongly Profiled Sandwich Panel with Mineral Wool Core	Shekhar Silwal	Shekhar, Silwal; Mela, Kristo; Ma, Zhongcheng
12:00-12:15			
12:15-12:30			

PS-3g | High-strength, stainless and other special steels | Room 7 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	On predicting the behaviour of an iron-based shape memory alloy with the Ramberg-Osgood model	Vlad Silvestru	Silvestru, Vlad-Alexandru; Deng, Zhikang; Taras, Andreas
10:45-11:00	Testing of post-fire brittleness for certain standard duplex and lean duplex stainless steel grades.	Mariusz Maslak	Maslak, Mariusz; Stankiewicz, Marek; Pazdanowski, Michal; Zajdel, Paulina
11:00-11:15	Deformation behaviour of high-strength steel welds using DIC	František Wald	Ghimire, Abhishek; Wald, František
11:15-11:30	Reliability Assessment of Eurocode 3 Design Rules for the Minor-Axis Buckling of HSS I-section Columns	José Osvaldo Ferreira Filho	Ferreira Filho, José Osvaldo; Simões da Silva, Luís; Tankova, Trayana; Carvalho, Hermes
11:30-11:45	Behaviour, finite element modelling and design of high strength steel homogeneous and hybrid welded I-section beams	Yufei Zhu	Zhu, Yufei; Yun, Xiang; Gardner, Leroy
11:45-12:00	Experimental investigations of residual stresses in thick high-strength steel plates	Michael Schäfers	Schäfers, Michael; Müller, Eckehard; Mensinger, Martin
12:00-12:15	Residual stresses in cold-formed square hollow sections of high strength steel	Iuliia Petukhovskaia	Petukhovskaia, Iuliia; Saremi, Pooya; Lu, Wei; Puttonen, Jari
12:15-12:30			

PS-3h | Fire resistance and structural robustness | Room 8 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Experimental and numerical investigation of reduced web section connections in fire	Katherine A. Cashell	Yabari, Oday; Alanen, Mika; Malaska, Mikko; Cashell, Katherine
10:45-11:00	Experimental testing of liner tray walls subjected to near field blast	Florea Dinu	Dinu, Florea; Neagu, Calin; Iaszlo, Robert; Ghiciei, Emilian; Senila, Mihai
11:00-11:15	High temperature push-out tests on demountable shear connectors of steel-concrete composite beams	Manuel L. Romero	Mansilla Ruiz, Roberto; Espinós, Ana; Paya-Zaforteza, Ignacio; Odenbreit, Christoph; Romero, Manuel L.
11:15-11:30	Experimental evaluation of the ultimate strength of wall sandwich panels under transverse loads	Florea Dinu	Dinu, Florea; Neagu, Calin; Senila, Mihai; Dubina, Dan; Ungureanu, Viorel
11:30-11:45	Predictive modelling of the cross-sectional reduction of smoke extraction ducts under fire resistance test	Ignasi Mundó	Mundó, Ignasi; Ichard, Mathieu; Caner, Ferhun; Mateo, Antonio
11:45-12:00	Modelling of bolted joints in fire using the component-based finite element method	Batuhan Der / František Wald	Der, Batuhan; Wald, František; Vild, Martin
12:00-12:15	Robustness evaluation and design of steel and steel-concrete buildings according to current standards and recent research results	Miguel Candeias	Candeias, Miguel; Obiala, Renata; Demonceau, Jean-François; Dinu, Florea; Marginean, Ioan; Weynand, Klaus
12:15-12:30	Experimental Study on Fire Performance of Polymer Foam Cavity Insulated Light Steel Framed Walls	Davor Skejić	Ščapec, Tomislav; Skejić, Davor; Jelčić Rukavina, Marija

PARALLEL SESSION 3 (PS-3) - Day 2 - 10:30-12:30

PS-3i | Seismic resistance, dynamics and vibration | Room 9 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Hybrid Coupled Walls with Replaceable Shear Links: Technical Solution and Seismic Performance of a 3D Multi-Story Building	Mihai Cristian Vulcu	Vulcu, Cristian; Hoffmeister, Benno; Bimbli, Dorina; Das, Rajarshi; Degée, Hervé
10:45-11:00	Design and analysis of steel-concrete hybrid coupled walls with hinged base and corner components	Alessandro Zona	Scozzese, Fabrizio; Ceccolini, Nicola; Zona, Alessandro; Dall'Asta, Andrea; Leoni, Graziano; Degée, Hervé
11:00-11:15	Innovative hybrid coupled wall systems to resist seismic action – HYCAD project	Hervé Degée	Das, Rajarshi; Zona, Alessandro; Morelli, Francesco; Vulcu, Cristian; Hoffmeister, Benno; Degée, Hervé
11:15-11:30	Experimental behaviour of optimized hybrid coupled shear walls	Agnese Natali	Morelli, Francesco; Natali, Agnese; Salvatore, Walter
11:30-11:45	Seismic performance of hybrid coupled shear walls	Francesco Morelli	Morelli, Francesco; Natali, Agnese; Poggi, Gabriele; Salvatore, Walter
11:45-12:00	Effective seismic retrofitting concept for existing car park buildings in moderate seismic regions	Georgios Balaskas	Terehovich, Vladislav; Balaskas, Georgios; Don, Rafaela; Hoffmeister, Benno
12:00-12:15	Seismic performance assessment of self-centering hybrid coupled walls: an 8-story case study structure	Mojtaba Farahi	Farahi, Mojtaba; Freddi, Fabio; Latour, Massimo
12:15-12:30	Simplified method for the vibration comfort assessment of steel-concrete floors induced by crowd-rhythmic activities	Mladen Lukic	EL ASRI, Youssef; Denoël, Vincent; Couchaux, Maël; Hjjaj, Mohammed; Lukić, Mladen

PS-3k | Welded Joints and Connections | Room 10 | Day 2 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	On the assessment of non-conformities - Is execution of steel structures a craft with zero defect tolerance?	Michael Volz	Volz, Michael; Spannaus, Max; Nagel, Sven
10:45-11:00	Geometric tolerances of welded connections with inelastic panel zones	Ce Wen	Wen, Ce; Skiadopoulos, Andronikos; Lignos, Dimitrios
11:00-11:15	Cold-formed steel T-joints with semi-oval hollow section chord: Experimental insight and finite element modelling	Man-Tai Chen	Oeng, Pouykan; Chen, Man-Tai; Young, Ben
11:15-11:30	The influence of axial misalignment on the load-bearing capacity of butt welded joints	Justus Voelkel	Voelkel, Justus; Bartsch, Helen; Feldmann, Markus
11:30-11:45	The Influence of Steel Variability on the Reliability of Welded Beam-to-Column Joints	Anđelo Valčić	Skejić, Davor; Valčić, Anđelo; Žuvelek, Vlaho; Čudina, Ivan
11:45-12:00	Innovative section to hollow section column-splice connections resorting to laser cutting	Rajarshi Das	Das, Rajarshi; Kanyilmaz, Alper; Couchaux, Maël; Degée, Hervé
12:00-12:15	New analytical approach for predicting the plastic shear resistance of the panel zone in steel joints	Jean-François Demonceau	Corman, Adrien; Jaspert, Jean-Pierre; Demonceau, Jean-François
12:15-12:30	Welding under service conditions - Influence of different boundary conditions during welding	Florian Begemann	Begemann, Florian; Unglaub, Julian; Thiele, Klaus

PARALLEL SESSION 4 (PS-4) - Day 2 - 14:00-15:30

PS-4a | Bolted Connections | Red Hall | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Fatigue performance of preloaded bolted connection with oversized holes	Angeliki Christoforidou	Christoforidou, Angeliki; Basker, Abishek; Barelt, Eric; Kavoura, Florentia; Pavlovic, Marko
14:15-14:30	Structural Response of Wire Arc Additively Manufactured Steel T-stub Connections	Xi Guo	Guo, Xi; Kyvelou, Pinelopi; Ye, Jun; Gardner, Leroy
14:30-14:45	Experimental investigation on stress state and de-formation in bolts through tightening of perfect flange connections	Christopher Schierl	Schierl, Christopher; Stang, Andre; Ghafoori, Elyas; Schaumann, Peter
14:45-15:00	A comparative experimental study on blind-bolted beam connections to square steel tubular columns filled with polyurethane foam or concrete	Konstantinos Skalomenos	Skalomenos, Konstantinos; Gunes, Sahin; Taleb, Farzad; Theofanous, Marios
15:00-15:15	Numerical Behaviour of Blind-Bolted Beam Connections to Square Hollow Sections with Different Infills	Konstantinos Skalomenos	Gunes, Sahin; Theofanous, Marios; Skalomenos, Konstantinos; Baniotopoulos, Charalambos
15:15-15:30	Seismic Performance of Brace Middle-Connection in Steel Concentrically Braced Frames with X-Bracing	Pablo Cano	Cano, Pablo; Imanpour, Ali; Tremblay, Robert

PS-4b | Steel Composite Structures | Blue Hall | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Modelling and response of composite steel-concrete members under cyclic loading	Ahmed Elghazouli	Sahin, Burak; Bravo-Haro, Miguel; Elghazouli, Ahmed
14:15-14:30	The FAILNOMORE project - Practice-oriented design recommendations against progressive collapse in steel and steel-concrete buildings	Jean-François Demonceau	Demonceau, Jean-François; Golea, Tudor; Elghazouli, Ahmed; Santiago, Aldina; Dinu, Florea; Baldassino, Nadia; Kuhlmann, Ulrike; Obiala, Renata; Weynand, Klaus
14:30-14:45	Load bearing behaviour of concrete encased composite columns with high-performance materials	Teodora Bogdan	Bogdan, Teodora; Ergun, Ozgun; Schurgacz, Przemyslaw; Anwaar, Omer; Risch, Manuel; Knobloch, Markus; Kurz, Wolfgang; Schaefer, Markus
14:45-15:00	Load introduction for concrete-encased steel composite columns using high-performance materials	Teodora Bogdan	Bogdan, Teodora; Risch, Manuel; Ergun, Ozgun; Anwaar, Omer; Schurgacz, Przemyslaw; Kurz, Wolfgang; Schaefer, Markus; Knobloch, Markus
15:00-15:15	Experimental determination of the fatigue behaviour of dowel strips in ortho-composite slabs for road bridges	Joachim Wisniewski	Wisniewski, Joachim; Stroetmann, Richard
15:15-15:30	Numerical Modeling of Steel-Concrete Composite Girders Exposed to Web Shear Buckling	Mehmed Numanovic	Numanovic, Mehmed; Knobloch, Markus

PS-4c | Fatigue and fracture | Room 2 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Fatigue strength assessment of riveted shear splice	Mario D'Aniello	Lettieri, Annarosa; Latour, Massimo; Rizzano, Gianvittorio; Milone, Aldo; D'Aniello, Mario; Landolfo, Raffaele
14:15-14:30	Development of an automated quality assurance approach for fatigue stressed welded joints	Christian Dănekas	Dănekas, Christian; Schaumann, Peter; Ghafoori, Elyas; Heikebrügge, Steffen; Heide, Klaas; Breidenstein, Bernd
14:30-14:45	Fatigue verification concept for details containing weld imperfections	Helen Bartsch	Bartsch, Helen; Feldmann, Markus
14:45-15:00	The influence of rib distortion on the fatigue resistance of orthotropic plated bridge decks	Philippe van Bogaert	Van Bogaert, Philippe; Van Staen, Gilles; De Backer, Hans
15:00-15:15	Changes to the lambda model for fatigue loads on rail bridges in Europe	Johan Maljaars	Maljaars, Johan; Verdenius, Stefan
15:15-15:30	Remote monitoring of an onshore wind turbine	Marco Simoncelli	Simoncelli, Marco; Zucca, Marco; Ghilardi, Matteo

PARALLEL SESSION 4 (PS-4) - Day 2 - 14:00-15:30

PS-4d | 3D printing and additive manufacturing | Room 3 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Local buckling of WAAM stainless steel circular columns	Yanan Huang	Huang, Yanan; Yang, Lu; Liu, Meiyu; Xu, Kelong
14:15-14:30	Novel Paradigm for Steel Joints in Gridshell Structures: from Structural Optimization to Advanced Construction	Mantai Chen	Chen, Man-Tai; Zuo, Wenkang; Huang, Yuner; Cheng, Bin; Zhao, Jincheng
14:30-14:45	Serial Uniqueness: Strengthening Standard Steel Profiles with WAAM Technology	Linus Paul Schmitz	Kloft, Harald; Schmitz, Linus; Babovic, Neira
14:45-15:00	Additive Manufacturing of a Steel Splice Joint for Tubular Elements in a Modular Wind Tower	Mariela de Los Angeles Mendez Morales	Mendez Morales, Mariela; Tankova, Trayana; Branco, Ricardo; Rebelo, Carlos
15:00-15:15	Experimental and numerical assessment of the topology optimization of additively manufactured T-joints	Kaike Monteiro	Pinto Monteiro, Kaike; Tankova, Trayana; Zhu, Carlos; Simoes da Silva, Luis; Santos, Francisca
15:15-15:30			

PS-4e | Bridge Construction and Structural Design | Room 5 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Development of Improved Equations for Live Load Moment Distribution in Interior Girders of Shallow Steel Tub Girder Bridges	Karl Barth	Barth, Karl; Michaelson, Gregory; Pyrialakou, V. Dimitra; Woldegabriel, Brook; Mason, Joshua
14:15-14:30	New Boca del Cerro Bridge at Section 1 of the "Tren Maya" railway	Miguel Ortega Cornejo	Ortega Cornejo, Miguel; Atanasio Utrilla, Pedro; Ugarte Gozález, Jokin; Ricón Crespo, Kevin
14:30-14:45	Urban Viaducts at Section 1 of the "Tren Maya" railway	Miguel Ortega Cornejo	Ortega Cornejo, Miguel; Atanasio Utrilla, Pedro; Suz Maroto, Alberto; Ugarte González, Jokin
14:45-15:00	Non-Destructive Testing of Bridge Cables using MIT	Daniel Ruff	Ruff, Daniel; Eirich, Hans
15:00-15:15	The cable-stayed footbridge in Prague - Radotín	Vladimir Janata	Janata, Vladimír; Lahodný, Jiří
15:15-15:30	Track-Bridge Interaction: Influence of Transition Zone on the Stability of Continuous Welded Rail	Akhil Upadhyay	C K, Ali Mubarak; Upadhyay, Akhil

PS-4f | Cold-formed Structures | Room 6 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Experimental Investigation of Sheathed Cold-Formed Steel Lipped Sigma Studs Under Compression Loading	Amirmohammad Yousefi	Yousefi, Amirmohammad; Samali, Bijan; Yu, Yang
14:15-14:30	Web Bearing Test of Cold-Formed Austenitic Stainless Steel Channels Under Interior Loading	Amirmohammad Yousefi	Yousefi, Amirmohammad; Samali, Bijan; Yu, Yang
14:30-14:45	Lateral performance of cold-formed steel OSB-sheathed stud wall panels	Iman Hajirasouliha	Mojtabaei, Seyed Mohammad; Yilmaz, Fatih; Becque, Jorgen; Hajirasouliha, Iman
14:45-15:00	Structural response of hybrid timber - cold formed steel floors	Dan Bompa	Bompa, Dan; Dance, George; Chira, Alexandru; Walker, Martin; Nagy, Zsolt
15:00-15:15	Closed built-up cold-formed steel columns under compression	Helder Craveiro	Craveiro, Helder; Rahnavard, Rohola; Santiago, Aldina; Laím, Luís; Simões, Rui
15:15-15:30			

PARALLEL SESSION 4 (PS-4) - Day 2 - 14:00-15:30

PS-4g | High-strength, stainless and other special steels | Room 7 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Monotonic and cyclic response of mild, stainless, and high-strength steels, and their welded connections	Anna Ene	Ene, Anna; Stratan, Aurel; Both, Ioan; Abrudan, Ovidiu
14:15-14:30	Load-carrying capacity of MAG butt and fillet welded joints on high-strength structural steels of grade S960QL and S960MC	Oliver Brätz	Brätz, Oliver; von Arnim, Mareike; Eichler, Stefan; Gericke, Andreas; Henkel, Knuth-Michael; Hildebrand, Jörg; Bergmann, Jean Pierre; Kuhlmann, Ulrike
14:30-14:45	Influence of the Plate Thickness on Fracture and Impact Toughness of Duplex Stainless Steels	Georjina Jabour	Afzali, Nariman; Jabour, Georjina Jabour; Stranghöner, Natalie; Langenberg, Peter
14:45-15:00	Design of stainless steel cross-sections by inelastic stability analysis	Jurgen Becque	Becque, Jurgen; Gilbert, Saul
15:00-15:15	Structural behavior of single-sided welded HSS-T-joints with softening in the heat-affected zone	Brian Rust	Rust, Brian; Kästner, Thoralf; Stroetmann, Richard
15:15-15:30			

PS-4h | Fire resistance and structural robustness | Room 8 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Mechanical properties of S355 butt welds at elevated temperatures	Aldina Santiago	Santiago, Aldina; Crescenzo, Pasquale; Craveiro, Helder; Latour, Massimo; Rodrigues, Dulce; Leitão, Carlos
14:15-14:30	Numerical Assessment of The Robustness of a Corner-supported Modular Steel Building	Si Hwa Heng	Heng, Si Hwa; Hyland, David; Hough, Michael; McCrum, Daniel
14:30-14:45	Fire exposure measurements using plate thermometers	Michał Malendowski	Malendowski, Michał; Szymkuc, Wojciech; Daszkiewicz, Tomasz; Turkowski, Piotr; Węgrzyński, Wojciech
14:45-15:00	A pyrolysis model for steel-insulation sandwich building façade systems under fire	Qingfeng Xu	Xu, Qingfeng; Hofmeyer, Hèrm; Maljaars, Johan; van Herpen, Ruud
15:00-15:15	Fire-Induced Collapse of Automated Rack-Supported Warehouses	Alessandro Mei	Mei, Alessandro; Orlando, Maurizio; Salvatori, Luca; Thiele, Klaus
15:15-15:30	Optimized fire design for steel industrial sheds	Filip Ljubinkovic	Ljubinkovic, Filip; Laim, Luís; Martins, Joao; Santiago, Aldina; Simoes da Silva, Luis; Cândido, Nuno; Cordeiro, Luís

PS-4i | Seismic resistance, dynamics and vibration | Room 9 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Statistical evaluation of the influence of manufacturing tolerances on the flexural cyclic behavior of I-shaped hot rolled steel beams	Cyrus Eshaghi	Eshaghi, Cyrus; Mohabeddine, Anis; Carneiro De Barros, Rui; Romão, Xavier; Castro, Miguel
14:15-14:30	Compressive Behaviors of Steel Braces with Different Sectional Shapes	Dong-Hyeon Shin	Shin, Dong-Hyeon; Kim, Hyung-Joon
14:30-14:45	Seismic Performance Evaluation of Moment Resistance Connection by Load Velocity.	Younghun Seol	Seol, Younghun; Lee, Kiwon; park, jaehan; Oh, Sanghoon
14:45-15:00	Experimental qualification of replaceable bolted links in dual eccentrically braced frames	Dan Dubina	Dubina, Dan; Stratan, Aurel
15:00-15:15	Experimental study on open core hybrid buckling restrained braces with different debonding layer geometries	Partha Sajal Kanti Deb	Das, Pallab Jyoti; Deb, Sajal Kanti
15:15-15:30	Optimisation of the damping properties of steel structures using adhesively bonded joints	Jannis Damm	Damm, Jannis; Albiez, Matthias; Ummenhofer, Thomas

PARALLEL SESSION 4 (PS-4) - Day 2 - 14:00-15:30

PS-4j | Welded Joints and Connections | Room 10 | Day 2 - 14:00-15:30

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Strength of connections between SHS columns and through plates	Sabatino Di Benedetto	Sato, Atsushi; Latour, Massimo; de la Pena, Amparo; Di Benedetto, Sabatino; Francavilla, Antonella Bianca; Rizzano, Gianvittorio
14:15-14:30	Study of the behaviour of S355 welded joints with CHS columns and through beams	Gabriele Zanon	Zanon, Gabriele; Safaeifaeigh, Shervin; Bursi, Oreste S.
14:30-14:45	Experiments on Welded High Strength Steel S700 K-joints	Omar Alshawwa	Alshawwa, Omar; Mela, Kristo; Ahola, Antti; Björk, Timo
14:45-15:00	Simulation of Welding Residual Stresses in Large Structures – First Results of Thermal Analyses	Stefanos Gkatzogiannis	Gkatzogiannis, Stefanos; Gantes, Charis
15:00-15:15	Heat management and tensile strength of 3 mm mixed and matched connections of butt joints of S355J2+N, S460MC and S700MC	Stefan Eichler	Eichler, Stefan; von Arnim, Mareike; Brätz, Oliver; Hildebrand, Jörg; Gericke, Andreas; Bergmann, Jean Pierre; Kuhlmann, Ulrike; Henkel, Knuth-Michael
15:15-15:30	Experimental and Numerical Programs on Laser-Cut I-Beam-to-CHS/SHS-Column Joint Components	Damian Händeler	Händeler, Damian; Don, Rafaela; Vulcu, Cristian; Hoffmeister, Benno; Kanyilmaz, Alper

PARALLEL SESSION 5 (PS-5) - Day 2 - 16:00-17:30

PS-5a | Bolted Connections | Red Hall | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Bearing failure analysis in the design of bolted connections with austenitic stainless steel	José Henriques	Sobrinho, Kelvin; da Silva, Andre; Rodrigues, Monique; Henriques, Jose; Lima, Luciano R
16:15-16:30	A new generalised component method for predicting the full range behaviour of bolted bearing type joints	Jingsheng Zhou	Zhou, Jingsheng; Yan, Shen; Zhang, Hao; Rasmussen, Kim; Deierlein, Gregory G.
16:30-16:45	Experimental and Numerical Study on Shear Behaviour of Bolted Inter-Modular Connection	Heshachanaa Rajanayagam	Rajanayagam, Heshachanaa; Gunawardena, Tharaka; Mendis, Priyan; Poologanathan, Keerthan; Perampalam, Gatheeshgar; Nagaratnam, Brabha; Corradi, Marco
16:45-17:00	Experimental investigation of influence parameters on cartridge fired pin resistance	Nina Gluhović	Gluhočić, Nina; Dobrić, Jelena; Spremić, Milan; Markovic, Zlatko
17:00-17:15	Durable bolted joints for steel structures	Frank Götz	Götz, Frank
17:15-17:30	Numerical Fatigue Strength curve for the C1 Wedge Connection	Mohabeddine Anis	Mohabeddine, Anis; Malschaert, David; Creusen, Koen Erwin Yvonne; Winkes, Jasper Stefan; Veljkovic, Milan

PS-5b | Steel Composite Structures | Blue Hall | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Flexural resistance of Cold-formed steel-lightweight concrete (CFS-LWC) composite beam	Rohola Rahnavard	Rahnavard, Rohola; Craveiro, Helder; Rui A., Simoes
16:15-16:30	Numerical investigations of the load-bearing and fatigue behavior of orthotropic composite slabs for road bridges	Camilla Lewerenz	Lewerenz, Camilla; Shirinzadeh, Mozdeh; Stroetmann, Richard
16:30-16:45	Metrics for the assessment of structural design efficiency applied to steel-framed industrial buildings	Filip Ljubinkovic	Ljubinkovic, Filip; Conde, Jorge; Gervasio, Helena; Simoes da Silva, Luis
16:45-17:00	Recycled CFRP Plate Retrofitting using Adhesive and TRS for Steel Girders	Masahiro Sakano	Sakano, Masahiro
17:00-17:15	Calibration of ductile and shear damage models for carbon and stainless steel shear studs	Rebecca Presswood	Presswood, Rebecca; Shaheen, Mohamed; Afshan, Sheida
17:15-17:30			

PS-5c | Fatigue and fracture | Room 1 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Design for fast execution and disassembling
16:00-16:15	Fatigue tests on connections of hollow sections made of high-strength steel with shape-optimized gusset plates	Matthias Winkler	Winkler, Matthias; Dürr, André; Herion, Stefan; Ladendorf, Philipp
16:15-16:30	Fatigue resistance of butt welds and longitudinal attachments	Gloria M.K. Hofmann	Hofmann, Gloria; Kuhlmann, Ulrike
16:30-16:45	Study of the effects of laser cutting processes on S235 structural steel	Gabriele Zanon	Zanon, Gabriele; Shamlooee, Majid; Brugnolli, Marco; Bursi, Oreste S.
16:45-17:00	Influence of loading frequency on ULCF life of structural steel under variable surface roughness	Aleena Saleem	Saleem, Aleena; Tamura, Hiroshi; Katsuchi, Hiroshi
17:00-17:15	Stress range in the welded cruciform joint in the shell model using the Hot Spot Stress Method	Kirill Golubiatnikov	Golubiatnikov, Kirill; Wald, František
17:15-17:30			

PARALLEL SESSION 5 (PS-5) - Day 2 - 16:00-17:30

PS-5d | 3D printing and additive manufacturing | Room 3 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Stiffening of slender plates using Wire Arc Additive Manufacturing	Trayana Tankova	Tankova, Trayana; Veljkovic, Milan
16:15-16:30	Additive manufacturing of steel components by cold spraying	Farrokh Taherkhani/Alina Klemm	Klemm, Alina; Taherkhani, Farrokh; Gündel, Max
16:30-16:45	Experimental local stability of 3D-printed stub columns stiffened by sinusoidal waves	Ben Chater	Chater, Ben; Wang, Jie; Evernden, Mark; Pan, Jingbang
16:45-17:00	Structural performance of additive manufactured aluminium stub columns	Junaid Abdullah J. Bawazeer	Bock, Marina; Bawazeer, Junaid; Robinson, John; Theofanous, Marios; Skalomenos, Konstantinos
17:00-17:15	Wire-and-Arc Additive Manufacturing for lattice steel structures: overview of the experimental characteri-zation on dot-by-dot rods	Lidiana Arrè	Arrè, Lidiana; Laghi, Vittoria; Palermo, Michele; Gasparini, Giada; Trombetti, Tomaso
17:15-17:30			

PS-5e | Bridge Construction and Structural Design | Room 5 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Renovating the Van Brienenoord Bridge Steelwork in mechanical system of bascule bridge spanning 50m.	Bert Hesselink	Janssens, Tom; Hesselink, Bert; Montijn, Jacques; van der Graaf, Patrick; de Kluijver, Erik; Mooijweer, Rik; Brands, Mack
16:15-16:30	Lateral trusses between I-girders introducing torsional stiffness to a composite bridge in Guatemala	Victor Vestman	Vestman, Victor; Jordán García, F. Javier; Santamaría Caballero, Guillermo; Collin, Peter
16:30-16:45	Influence of eccentric load introduction during launching with rockers using an elastomeric bearing	Nadine Thomas	Thomas, Nadine; Mensinger, Martin; Ndogmo, Joseph
16:45-17:00	The effect of temperature actions on single-sided fillet welds in small-sized box girders of bridges	Malik Ltaief	Ltaief, Malik; Mensinger, Martin
17:00-17:15	Efficient Design of an Office building as Steel/Timber hybrid – A case study	Omer Anwaar	Anwaar, Omer; Matias de Paula Filho, José Humberto; Bello Garcia, Micael
17:15-17:30	System redundancy of steel I-girder bridges and proposal of a system factor for load rating	Yoshiaki Okui	Okui, Yoshiaki

PS-5f | Cold-formed Structures | Room 6 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Effect of Intermediate Stiffeners in an Optimization of Axially Compressed Built-up Thin-Walled Column Cross-Sections According to the Eurocode 3	Mantas Stulpinas	Stulpinas, Mantas; Daniūnas, Alfonsas
16:15-16:30	Assessment of Eurocode 3 shear design provision for cold-formed steel beams with web holes	Gatheeshgar Perampalam	Perampalam, Gatheeshgar; Bock, Marina; Chandrasiri, Dilanka; Suntharalingam, Thadshajini
16:30-16:45	Flexural behaviour of CFS stacked built-up beams: experiments, finite element modelling and direct strength method	Hooman Rezaeian	Rezaeian, Hooman; Andarini, Rhonita
16:45-17:00	Proposal for the approach of torsional restraint by sandwich panels under uplifting loads	Tim Krieglstein	Krieglstein, Tim; Kühn, Bertram; Naujoks, Bernd
17:00-17:15	Experimental campaign on components of steel frames for elevators	Marco Simoncelli	Baldassino, Nadia; Bernuzzi, Claudio; Simoncelli, Marco
17:15-17:30			

PARALLEL SESSION 5 (PS-5) - Day 2 - 16:00-17:30

PS-5g | High-strength, stainless and other special steels | Room 7 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Web crippling behaviour of cold-formed high-strength steel unlipped channel beams	Elilarasi Kanthasamy	Kanthasamy, Elilarasi; Alsanat, Husam; Poologanathan, Keerthan; Perampalam, Gatheeshgar; Shanmuganathan, Gunalan; Nagaratnam, Brabha; Corradi, Marco
16:15-16:30	Design of aluminium Sigma sections for web crippling behaviour under Interior Two Flange (ITF) load case	Kajaharan Thirunavukkarasu	Thirunavukkarasu, Kajaharan; Alsanat, Husam; Poologanathan, Keerthan; Shanmuganathan, Gunalan; Perampalam, Gatheeshgar; Kanthasamy, Elilarasi; Higgins, Craig
16:30-16:45	Effect of heat treatment on microstructure and pseudoelasticity of a memory-steel	Maryam Mohri	Mohri, Maryam
16:45-17:00	Research on high-performance steel structure with high-strength steel column, ordinary-strength steel beam, and low-yield-point steel BRB	Gang Shi	Shi, Gang; Zhao, Huatian; Gao, Yang
17:00-17:15	Seismic Behaviour of High-Strength Steel Welded Flange-Bolted Web Connections	Fangxin Hu	Hu, Fangxin; Wang, Zhan
17:15-17:30			

PS-5h | Fire resistance and structural robustness | Room 8 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	Burnout resistance of concrete-filled steel tubular (CFST) columns under realistic fire conditions	Wojciech Szymkuc	Szymkuc, Wojciech; Malendowski, Michał; Glema, Adam
16:15-16:30	Ductile fracture simulation on 10.9 HP bolts under composite loading at elevated temperatures	Jie Li	Li, Jie; Xin, Haohui; Veljkovic, Milan
16:30-16:45	Ultimate behaviour of bolted connections in large rotations	Antonella Bianca Francavilla	Francavilla, Antonella; Latour, Massimo; Tan, P.J.; Rizzano, Gianvittorio
16:45-17:00	The influence of the steel beam-concrete slab interaction on the robustness capacity of steel frames	Dominik Jakab	Jakab, Dominik; Dinu, Florea; Neagu, Calin; Dubina, Dan
17:00-17:15	Resistance and behaviour of carbon steel and stainless steel columns with axial and rotational end-restraints in fire	Merih Kucukler	Quan, Chunyan; Murtaza, Hasan; Kucukler, Merih
17:15-17:30	Progressive collapse analysis of steel frames via a nonlinear SDOF model	Christoforos Dimopoulos	Dimopoulos, Christoforos

PS-5i | Seismic resistance, dynamics and vibration | Room 9 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	In-plane cyclic tests on CFS drywall partitions for seismic demand of power actuated fasteners.	Luigi Fiorino	FIORINO, LUIGI; Campiche, Alessia; Grzesik, Peter; Landolfo, Raffaele
16:15-16:30	Influence of reinforced concrete slab on the cyclic response of bolted shear links	Adriana Chesoa	Chesoa, Adriana; Stratan, Aurel; Ciutina, Adrian
16:30-16:45	Simplified Nonlinear Dynamic Analysis by Hexagonal Collapse Surface Model of Steel Frame Structure	Viliana Jainih	Jainih, Viliana; Choi, Jaehyouk
16:45-17:00	Development of pinching-free tension-only CBFs based on the application of metal foam dampers	Massimo Latour	Sato, Atsushi; Latour, Massimo; Rizzano, Gianvittorio
17:00-17:15	Assessment of steel-concrete composite floors dynamic response when subjected to people walking	José Guilherme Santos da Silva	Viana Aguiar, Jefferson; Elisa Ferreira, Bárbara; Carvalho, Hermes; Santos da Silva, José Guilherme
17:15-17:30	Experimental study on earthquake-induced pounding between steel structures	Robert Jankowski	Softysik, Barbara; Jankowski, Robert

PARALLEL SESSION 5 (PS-5) - Day 2 - 16:00-17:30

PS-5j | Reuse and Retrofitting of Structural Element | Room 10 | Day 2 - 16:00-17:30

Chairperson: TBD

Time	Title	Speaker	Authors
16:00-16:15	The pavilion "Petite Maison" of the European Cultural Capital Esch'22: A case study of circular economy benefits in steel construction	Shahin Sayyareh	Sayyareh, Shahin; Ummenhofer, Thomas; Odenbreit, Christoph
16:15-16:30	Structural Performance of Demountable Hybrid Floor Systems Under Monotonic and Cyclic Loading	Florentia Kavoura	Kavoura, Florentia; Zhang, Yufei; Veljkovic, Milan
16:30-16:45	Fatigue strengthening of cracked steel plates with bonded Fe-SMA strips	Lingzhen Li	Li, Lingzhen; Wang, Sizhe; Chen, Tao; Chatzi, Eleni; Heydarinouri, Hossein; Ghafoori, Elyas
16:45-17:00	Shape Memory Alloy-Based Seismic Retrofit of an Existing URM Building	Maria Ntina	Ntina, Maria I.; Efthymiou, Evangelos
17:00-17:15	Dynamic Increase Factors for progressive collapse analysis of steel structures accounting for column buckling	Luca Possidente	Possidente, Luca; Freddi, Fabio; Tondini, Nicola
17:15-17:30			

EUROSTEEL 2023 - DAY 3

Keynote lectures | Red Hall

Day 3 - 9:00-10:00

Chairperson: TBD

Time	Title	Speaker
09:00-09:30	Keynote lecture Prequalified seismic-resistant steel moment connections in the U.S.	Michael D. Engelhardt
09:30-10:00	Keynote lecture High performance metallic materials and structures for applications in infrastructure and energy sectors	Sheida Afshan

PARALLEL SESSION 6 (PS-6) - Day 3 - 10:30-12:30

PS-6a | Steel Composite Structures | Red Hall | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Influence of Temperature on the Mechanical Behavior of Sandwich Panels	Sonja Steineck	Steineck, Sonja; Lange, Jörg
10:45-11:00	Investigating the impact of thermal stresses on blistering effects in sandwich panels	Annalena Kühn	Kühn, Annalena; Haugwitz, Christoph; Hinrichs, Jan; Kupnik, Mario; Lange, Jörg
11:00-11:15	Demountable shear connectors – constructional details and push-out tests	Krisztián Király	Király, Krisztián; Dunai, László; Calado, Luis; Kocsis, András Balázs
11:15-11:30	Study on headed shear studs influencing the interfacial bond behaviour in CFST columns	Partha Debnath	Debnath, Partha; Chen, Junbo; Varma, Amit H.; Chan, Tak-Ming
11:30-11:45	Behaviour of demountable steel-concrete composite beams with bolts and headed studs	Isidora Jakovljević	Jakovljević, Isidora; Spremić, Milan; Fric, Nenad; Marković, Zlatko
11:45-12:00	Structural performance evaluation of thin walled concrete filled steel tube column to reinforced concrete wide beam connection	Jinwon Kim	kim, jinwon; kim, daehee; lee, kyungku
12:00-12:15	Numerical studies on the torsional behavior of octagonal concrete-filled linked double steel tubes	Mashudha Sulthana	Sulthana, Mashudha
12:15-12:30			

PS-6b | Steel Composite Structures | Blue Hall | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Robustness of Sandwich Panels Subjected to Blast Wave	Robert Studziński	Studziński, Robert; Malendowski, Michał; Sumelka, Wojciech; Gajewski, Tomasz; Peksa, Piotr; Sielicki, Piotr
10:45-11:00	Experimental study of the cyclic behavior of steel tube in concrete-filled steel tube members	Shiye Wang	Wang, Shiye; Wang, Wei; Lignos, Dimitrios
11:00-11:15	Experimental investigations on composite stub columns: hollow sections with embedded solid core made of HSS	Till Janiak	Janiak, Till; Nonn, Jonas; Wolters, Kevin; Classen, Martin
11:15-11:30	Calibrated Design of High Strength Composite Columns	Šarūnas Kelpša	Kelpša, Šarūnas; Beckmann, Oliver; Guobys, Raimondas; Schurgacz, Przemysław; Augonis, Mindaugas
11:30-11:45	A comparative study on steel-concrete composite columns for use in RC Tall Buildings in Seismic Areas	Hazal Mert	Mert, Hazal; Celik, Oguz Cem
11:45-12:00	Axial behaviour of steel tubes infilled with rubberised alkali-activated concrete	Ahmed Elghazouli	Elzeadani, Mohamed; Bomp, Dan; Elghazouli, Ahmed
12:00-12:15	Determination of overall factor for the application of the General Method based on plastic and strain-limited N-M interaction for composite compression members	Pellumb Zogu	Zogu, Pellumb; Schäfer, Markus
12:15-12:30			

PARALLEL SESSION 6 (PS-6) - Day 3 - 10:30-12:30

PS-6c | Bolted Connections | Room 1 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Design for fast execution and disassembling
10:30-10:45	Full-Scale Steel Moment-Resisting Frame with Dissipative Bolted Connections under Monotonic Loads: Experimental versus Numerical Results	Georgios Balaskas	Balaskas, Georgios; Don, Rafaela; Vulcu, Cristian; Hoffmeister, Benno
10:45-11:00	Preliminary study of axial-moment interaction dia-grams for semi-rigid end plate bolted connections.	Javier Gracia Rodríguez	Gracia, Javier; Gil, Beatriz; Bayo, Eduardo
11:00-11:15	Effect of Curling Phenomenon on Block Shear and Tear-out Strengths of Bolted Connections	Cao Hung Pham	Pham, Viet Binh; Pham, Cao Hung; Hancock, Gregory J.
11:15-11:30	Large beam-to-column steel joint for the DUNE Neutrino Experiment: experimental and numerical insights.	Jorge Conde	Simoes da Silva, Luis; CRAVEIRO, HELDER; Simões, Rui; Martins, Claudio; Conde, Jorge
11:30-11:45	Strength Evaluation of Pipe-Rack Connection Using Extended End Plate	Seonghun Kang	Kang, Seong-Hun; Woo, Jonghun; Shin, Kyungjae; Lee, Woogeun; Park, Hwain
11:45-12:00	Load-deformation behavior of injection bolts for maintenance of steel structures under dynamic loads	Lisa Kröger	Ungermann, Dieter; Kröger, Lisa
12:00-12:15	Development of a preloadable, temperature-stable, geopolymer-based gap compensation material	Hendrik Morgenstern	Morgenstern, Hendrik; Kunde, Carsten; Raupach, Michael
12:15-12:30	Column web component under out-of-plane loading: experimental and numerical studies	Melaku Seyoum Lemma	Lemma, Melaku Seyoum; Simões da Silva, Luís; Conde, Jorge Conde; Rebelo, Carlos

PS-6d | Fatigue and fracture | Room 2 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Suitable choice of material to avoid brittle fracture on Jacket foundations of offshore wind turbines	Philipp Krah	Krah, Philipp; Kühn, Bertram
10:45-11:00	Recent progress in computer-aided ductile fracture and fatigue damage analysis of steel connections	Haohui Xin	Xin, Haohui
11:00-11:15	Fatigue Life Prediction of S235 Details Based on Dislocation Density	Bruno Alexandre Silva Pedrosa	Pedrosa, Bruno; Correia, José; Gripp, Iara; Fernandes, Lisete; Rebelo, Carlos
11:15-11:30	Fatigue verification of orthotropic bridge decks with the hot-spot method – Background to TS 1993-1-901	Johan Maljaars	Maljaars, Johan; Pijpers, Richard; Veljkovic, Milan; Van Dooren, Frank
11:30-11:45	A triaxiality-dependent fracture model for hot-rolled sections made of S355 steel	Pelagia Kastiza	Kastiza, Pelagia; Skalomenos, Konstantinos; Theofanous, Marios
11:45-12:00	Fatigue resistance of austenitic stainless steel bolts under tension	Lukas Ehrhardt	Stranghoner, Natalie; Ehrhardt, Lukas
12:00-12:15	Investigations on the fatigue behaviour of welded cover plates with extended weld seams.	Jakob Roth	Roth, Jakob; Dürr, André; Mensinger, Martin; Rausch, Niclas
12:15-12:30			

PS-6e | 3D printing and additive manufacturing | Room 3 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	3D-printing with steel on thin sheets for application in free form façade construction: welding process development and material properties	Philipp Grebner	Grebner, Philipp; Lange, Jörg
10:45-11:00	Metal 3D-Printing for Repair of Steel Structures	Elyas Ghafoori	Ghafoori, Elyas; Dahaghin, Hamid; Diao, Chenglei; Pichler, Niels; Li, Lingzhen; Ding, Jialuo; Ganguly, Supriyo; Williams, Stewart
11:00-11:15	Effects of Deposition Rate on Local Stability of Wire Arc Additively Manufactured Outstand Elements	Sian Evans	Evans, Sian; Hadjipantelis, Nicolas; Wang, Jie
11:15-11:30	Experimental study on the local buckling response of WAAM stainless steel square hollow sections	Jie Wang	Evans, Sian; Xu, Fangda; Wang, Jie
11:30-11:45	Buckling tests on wire arc additively manufactured SHS columns	Cheng Huang	Huang, Cheng; Meng, Xin; Gardner, Leroy
11:45-12:00	Robot supported Wire Arc Additive Manufacturing of Steel Columns	Benedikt Waldschmitt	Waldschmitt, Benedikt; Lange, Jörg
12:00-12:15	Metal additively versus conventionally manufactured structures – An environmental life cycle assessment	Nicolas Hadjipantelis	Hadjipantelis, Nicolas; Shah, Izhar Hussain; Walter, Lulu; Myers, Rupert J.; Gardner, Leroy
12:15-12:30			

PARALLEL SESSION 6 (PS-6) - Day 3 - 10:30-12:30

PS-6f | Stability of cross-sections, members and frames | Room 5 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Bracing requirements for a semi-rigidly connected column considering column lateral stiffness and initial curvature	Lei Xu	Zhang, Linbo; Xu, Lei
10:45-11:00	Influence of imperfections in the design of crane runway I-beams	Michal Kovac	Kovac, Michal; Aroch, Rudolf
11:00-11:15	Comparison between numerical models intended for multiple bay pallet racks	Oriol Bové	Bové, Oriol; Casafont, Miquel; Bonada, Jordi; López-Almansa, Francesc
11:15-11:30	On the Capacity of Beams with U Cross Section Subjected to Bending and Torsion	Caridad Moscoso	Moscoso, Caridad; Kraus, Matthias
11:30-11:45	Experimental investigations of the flexural-torsional buckling resistance: Steel rolled I-shape beam-columns with mid-length lateral-torsional restraint	Pawel Wiedro	Gizejowski, Marian; Nykiel, Damian; Jastrzębski, Kamil; Ślęczka, Lucjan; Wiedro, Pawel
11:45-12:00	Experimental investigation of steel frames made of hybrid steel welded I-sections	Xiang Yun	Yun, Xiang; Zhu, Yufei; Gardner, Leroy
12:00-12:15	Applications of 3D scanning and digital image correlation in structural experiments	Xin Meng	Meng, Xin; Pullen, Andy; Guo, Xi; Yun, Xiang; Gardner, Leroy
12:15-12:30			

PS-6g | Masts and towers, Offshore Structures | Room 6 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Imperfections in realistic metal wind turbine support towers: a one-at-a-time (OAT) study	Lijithan Kathirkamanathan	Sadowski, Adam; Kathirkamanathan, Lijithan; Seidel, Marc
10:45-11:00	Performance-based wind engineering assessment of a telecommunication mast	Ágnes Kenéz	Kenéz, Ágnes; Joó, Attila László
11:00-11:15	Wrapped Composite Joints for Circular Hollow Section Structures	Marko Pavlovic	Pavlovic, Marko; Veljkovic, Milan; Segeren, Maxim
11:15-11:30	Design and weight optimisation of Offshore Topsides platforms using High Strength Steel	Miguel Candeias	Candeias, Miguel; Di Silvestro, Elena; Wain, Geraldine; Ville, Wishnu; Cecchini, Luca
11:30-11:45	New developments in heavy plates for offshore structures	Tobias Graf	Lehnert, Tobias; Graf, Tobias
11:45-12:00	Load carrying capacity of star-battened angle members made of S460 steel in compression	Marios-Zois Bezas	Bezas, Marios-Zois; Antonodimitraki, Sofia; Beyer, Andre; Anwaar, Omer; Maesschalck, Jan; Jaspert, Jean-Pierre; Demonceau, Jean-François
12:00-12:15	Strengthening of axially compressed bars in lattice towers under load – experimental investigations	Lucjan Ślęczka	Jastrzębski, Kamil; Ślęczka, Lucjan
12:15-12:30	Buckling resistance of angle bracing members with one-leg bolted end connections	Sofia Antonodimitraki	Antonodimitraki, Sofia; Bezas, Marios-Zois; Demonceau, Jean-François; Vayas, Ioannis; Maesschalck, Jan; Anwaar, Omer; Jaspert, Jean-Pierre

PS-6h | Eurocode and international design codes | Room 7 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Major-axis buckling of pin-ended stainless steel equal-leg angle section members: FE modelling and design	Behnam Behzadi-Sofiani	Behzadi-Sofiani, Behnam; Wadee, Ahmer; Gardner, Leroy
10:45-11:00	Measurement and statistical analysis of deviations in the cross-sectional geometry of hot-rolled I-sections	Robin Steinmetz	Steinmetz, Robin; Taras, Andreas
11:00-11:15	Interaction Formulae for N-My and N-Mz and their Accuracy in Hollow Sections	Christian Ludwig	Ludwig, Christian
11:15-11:30	Evaluation of Design Codes for Hot-Rolled Steel Angles in Concentric and Eccentric Compression	Luís Simões da Silva	Onésimo Gomes Junyor, José; Carvalho, Hermes; Simões da Silva, Luís; Filho, José; Lavall, Armando
11:30-11:45	Ductility classes in prEN 1998-1. Comparative analysis on concentrically braced frames	Bogdan Catalin Stefanescu	Stefanescu, Bogdan Catalin
11:45-12:00	Revision of the standard EN 1993-1-11 and background information	José Oliveira Pedro	Friedrich, Heinz; Misiek, Thomas; Pedro, José Oliveira; Ruff, Daniel
12:00-12:15	Improved Design Rules for Stainless and Carbon Steel Bolts Loaded in Tension and Shear	Christoph Abraham	Abraham, Christoph; Stranghøner, Natalie
12:15-12:30			

PARALLEL SESSION 6 (PS-6) - Day 3 - 10:30-12:30

PS-6i | Fire resistance and structural robustness | Room 8 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Stability behaviour of sinusoidal corrugated web girders under fire conditions	Kollár Dénes	Kollár, Dénes
10:45-11:00	Structural Behaviour of Steel-Fibre-Reinforced Composite Floor System for Modular Construction	Li Shan	Li, Shan; Gondokusumo, Gilbert; Liew, J. Y. Richard
11:00-11:15	Local buckling response and design of stainless steel hollow sections at elevated temperatures	Chunyan Quan	Quan, Chunyan; Kucukler, Merih
11:15-11:30	Structural response and design of stainless steel hollow section columns at elevated temperatures	Chunyan Quan	Quan, Chunyan; Kucukler, Merih
11:30-11:45	Robustness analysis for composite multi-storey modular buildings subjected to wind loads	Gaurav Swami	Swami, Gaurav; Thai, Huu-Tai; Liu, Xuemei
11:45-12:00	Localised fire assessment of a steel structural solution in a pilot building	Antonio Gamba	Gamba, Antonio
12:00-12:15	On the reliability of a numerical travelling fire model	Antonio Gamba	Gamba, Antonio
12:15-12:30	Preventing failure propagation in steel truss bridges	Nirvan Makoond	Sánchez Rodríguez, Ana; López, Santiago; Makoond, Nirvan; Buitrago, Manuel; Riveiro, Belen; Adam, Jose M.

PS-6j | Seismic resistance, dynamics and vibration | Room 9 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Comparative study regarding the seismic design of diagonal concentrically braced frames	Helmuth Köber	Köber, Helmuth; Marcu, Ramona; Stoian, Marina
10:45-11:00	The influence of hinged and rigid connections on the seismic behaviour of "Inverted Y" bracing systems	Helmuth Köber	Köber, Helmuth; Stoian, Marina; Marcu, Ramona
11:00-11:15	Seismic Behaviour of High-Strength Steel Bolted Extended End-Plate Connections	Fangxin Hu	Hu, Fangxin; Wang, Zhan
11:15-11:30	Performance of short links with flush and extended end plate connections using FEM analysis	Francesco Plaitano	Plaitano, Francesco; Stratan, Aurel; Chesoin, Adriana; Nastri, Elide
11:30-11:45	Wind hazard on earthquake damaged buildings	Lucia Tirca	Athanasίου, Anastasia; Dakour, Mohamad; Tirca, Lucia; Stathopoulos, Theodore
11:45-12:00	Cyclic Behavior of Single and Double-angle Bracing Members Employed in Pipeline Supporting Structures	Go Hyun	Go, Hyun; Kim, Hyung-Joon
12:00-12:15	Numerical assessment of the cyclic behaviour of structural steel members subjected to biaxial bending	Elisa Cerqueira	Cerqueira, Elisa; Eshaghi, Cyrus; Peres, Rita; Castro, José Miguel
12:15-12:30			

PS-6k | Reuse and Retrofitting of Structural Element | Room 10 | Day 3 - 10:30-12:30

Chairperson: TBD

Time	Title	Speaker	Authors
10:30-10:45	Design and Numerical Simulation of a Reusable Steel Column Base Connection with Pinned Energy Dissipators	Qi Ma	MA, Qi; Chan, Tak-Ming
10:45-11:00	Potentials of reusing steel skeleton structures from multistorey parking units for architectural applications	Hilke Manot	Manot, Hilke; Lienhard, Julian
11:00-11:15	Design for disassembling, reuse, and the circular economy: a demonstration building, "Petite Maison"	Jie Yang	Odenbreit, Christoph; Yang, Jie; Kozma, András; Romero, Alfredo; Popa, Nicoleta; Hanus, François; Obiala, Renata
11:15-11:30	Innovative orthotropic deck strengthening design for the Suurhoff lifting bridge	Fruzsina Csillag	Rikken, Maarten; Csillag, Fruzsina; Sonneveld, Michelle; Gratton, David; Gibson, Rupert; Montalbini, Gianmarco
11:30-11:45	Experimental Testing of Post-installed Anchors for Use in Retrofitting of RCC Frame with Steel Braces	Devayani Tewatia	Tewatia, Devyani; Kumar, P.C. Ashwin
11:45-12:00	Out of the box strengthening design of steel box girder for an existing tied-arch bridge	Felix de Meijier	de Meijier, Felix; Tjepkema, Daan; van Es, Sjoers
12:00-12:15			
12:15-12:30			

PARALLEL SESSION 7 (PS-7) - Day 3 - 14:00-16:00

PS-7a | Steel Composite Structures | Red Hall | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Investigation of wood-steel composite shear walls behavioural parameters	Tzanetis Vogiatzis	Vogiatzis, Tzanetis; Efthymiou, Evangelos; Tsalkatidis, Themistoklis
14:15-14:30	Shear Capacity of Channel Shear Connectors Applied in Composite Slabs with Profiled Steel Decking	Luis Augusto Pupin/Cardoso Hermann	Cardoso, Hermano; Pupin, Luis
14:30-14:45	Size effects on the structural behaviour of wrapped composite CHS joints	Jincheng Yang	Yang, Jincheng; Koetsier, Mathieu; Peeters, Tjeu; Wolters, Mees; Pavlovic, Marko
14:45-15:00	A review on long-term behaviour of steel-concrete composite structures	Youtian Wang	Wang, Youtian; Khan, Mahbub; Li, Dongxu; Uy, Brian; Thai, Huu-Tai; Ngo, Tuan
15:00-15:15	Review and outlook about the use of high strength steel in encased composite columns	Renata Obiala	Obiala, Renata; Anwaar, Omer; Yang, Jie; Zanon, Riccardo
15:15-15:30	Tensile behavior of anchored T-head blind bolts within concrete-filled steel square hollow sections	Yiao Lin Zhao	Li, Yinglei; Huang, Mingxian; Zhao, Xiao Lin
15:30-15:45	Effect of salt water ageing on the degradation of steel-composite bonded interfaces	Marcio Rouche	Moreira Arouche, Marcio; Feng, Weikang; Karatsi, Paraskevi; Kapteijn, Tim; Pavlovic, Marko
15:45-16:00			

PS-7b | Steel Composite Structures | Blue Hall | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Investigations on the stability behaviour of axially loaded sandwich panels with integrated longitudinal profiles	Kevin Janczyk	Janczyk, Kevin; Kuhnhenne, Markus
14:15-14:30	New fire resistance design approach for concrete-filled cold-formed steel (CF-CFS) built-up composite column	Rohola Rahnavard	Rahnavard, Rohola; Craveiro, Helder; Rui A., Simoes
14:30-14:45	Parametric study for Y-shape perfobond shear connections	Nauzika Kovács	Meffeh, Wajdi; Kovács, Nauzika
14:45-15:00	Comparative study of different steel-concrete composite shear walls	Omer Anwaar	Anwaar, Omer; Pepe, Davide; Zanon, Riccardo
15:00-15:15	Characterizing the transition zone between steel-concrete composite and reinforced concrete members	Dan Dragan	Dragan, Dan; Das, Rajarshi; Degée, Hervé
15:15-15:30	Finite Element Analyses of Demountable Shear Connection in Cold-Formed Steel-Concrete Composite Beam Based on Experimental Data	Vlaho Žuvelek	Žuvelek, Vlaho; Čurković, Ivan; Lukačević, Ivan; Rajić, Andrea
15:30-15:45	Structural behavior of sigma-type thin-walled cold-formed steel beams reinforced with CFRP textile	Katarzyna Rzeszut	Rzeszut, Katarzyna; Dybizbański, Maciej
15:45-16:00			

PS-7c | Design for fast execution and disassembling | Room 1 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Buckling Check of Structures Being Lifted	Rafael Scudelari de Macedo / Luiz Francisco Scudelari de	Scudelari de Macedo, Luiz Francisco; Scudelari de Macedo, Rafael
14:15-14:30	Partially sleeved joints between hollow sections using self-drilling screws	Carlos López-Colina	López-Colina, Carlos; García García, Ismael; Serrano, Miguel A.; Picallo, Diego G.; Vigón, Paula
14:30-14:45	I-Twin. Computational twin connectors for I-profiles. Towards unforeseen interoperability of digital tools	Hector Posada	Posada, Hector; Chacón, Rolando; Ramonell, Carlos
14:45-15:00	Experimental response of full-scale steel-aluminium foam-steel sandwich panels in bending	Massimo Latour	Sato, Atsushi; Latour, Massimo; D'Aniello, Mario; Rizzano, Gianvittorio; Landolfo, Raffaele
15:00-15:15	Swift-Constructed Demountable Blind Bolt for Fast Execution and Disassembling of SHS Connection	Xiao-Zhou Han	Han, Xiao-Zhou; Chan, Tak-Ming
15:15-15:30			
15:30-15:45			
15:45-16:00			

PARALLEL SESSION 7 (PS-7) - Day 3 - 14:00-16:00

PS-7d | Fatigue and fracture | Room 2 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Different fatigue design stress methods for common constructional details in cylindrical shells under axial loading – Influence of the r/t -ratio and the shell thickness	Alexander Ecker	Ecker, Alexander; Unterweger, Harald
14:15-14:30	Hybrid fatigue crack propagation analysis using damage and fracture mechanics methods	Weijian Wu	Wu, Weijian; Rasmussen, Kim; Michel, Alexander; Stang, Henrik
14:30-14:45	Towards an advanced fatigue assessment of welded steel joints with multi-axial stress states	Simon Steinhoff	Steinhoff, Simon; Knobloch, Markus
14:45-15:00	Multiaxial fatigue analysis of circumferentially butt-welded steel connection using fiber optic based distributed strain sensing	Olena Karpenko	Karpenko, Olena; Koetsier, Mathieu; Pavlovic, Marko
15:00-15:15	Fatigue behavior of girder with flange thickness transitions and cope holes - tests and simulations	Stefanie Röscher	Röscher, Stefanie; Knobloch, Markus; Derler, Christoph; Langwieser, Martin; Unterweger, Harald
15:15-15:30	Simplified approaches for material characterization – an alternative for advanced fatigue design methods	Marion Rauch	Rauch, Marion
15:30-15:45	Comparison of seven ductile fracture initiation prediction models for stainless steel	Tamilselvan Nambirajan	Nambirajan, Tamilselvan; Ghosh, Diptarka; Kumar, P C Ashwin
15:45-16:00			

PS-7e | 3D printing and additive manufacturing | Room 3 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Proposal and experimental verification of additive manufactured beam-column connection designed by topological optimization.	Beatriz Gil	Gil, Beatriz; Gofii, Rufino; Fábregas, María Isabel; Bayo, Eduardo
14:15-14:30	Optimisation and testing of simply-supported WAAM beams	Ben Weber	Weber, Ben; Meng, Xin; Nitawaki, Masashi; Gardner, Leroy
14:30-14:45	Experimental investigation on cyclic behaviour of wire arc additively manufactured carbon steel	Zhongxing Wang/yuhang Hou	Wang, Zhongxing; Hou, Yuhang
14:45-15:00	Buckling tests on I-section steel columns strengthened by additive manufacturing	Leroy Gardner	Gardner, Leroy; Li, Jin; Meng, Xin; Huang, Cheng; Kyvelou, Pinelopi
15:00-15:15	Testing and analysis of optimised wire arc additively manufactured steel trusses	Pinelopi Kyvelou	Kyvelou, Pinelopi; Spinasa, Athina; Gardner, Leroy
15:15-15:30	Rotating bending fatigue behaviour and monotonic tensile properties of Wire Arc Additively Manufactured 308L stainless steel	Davide Leonetti	Leonetti, Davide; Kassings, Luuk; de Munnik, Max; Khan, Danish; Moulin, Jean-Francois; Snijder, Bert
15:30-15:45			
15:45-16:00			

PS-7f | Stability of cross-sections, members and frames | Room 5 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	The effect of prebuckling deflections on the lateral-torsional buckling of beams: numerical studies	Ghaith Atef Aref Abu Reden	Abu Reden, Ghaith; Adany, Sandor
14:15-14:30	Digital-Image-Correlation for Simulating Cyclic Local Buckling in Steel Beams	Selimcan Ozden	Ozden, Selimcan; de Castro e Sousa, Albano; Lignos, Dimitrios
14:30-14:45	Lateral torsional buckling of hot rolled channel sections – Numerical simulations and design proposal	André Beyer	Beyer, André; Bureau, Alain; Boissonnade, Nicolas; Khellil, Abdelouahab
14:45-15:00	Towards a stability verification of two-span members based on experimental and numerical investigations	Anna-Lena Bours	Bours, Anna-Lena; Winkler, Rebekka; Knobloch, Markus
15:00-15:15	Novel formula for the elastic critical moment of beams with corrugated web	Gábor Hajdú	Hajdú, Gábor; Papp, Ferenc
15:15-15:30	Proposed residual stress model for hot-rolled wide flange steel cross sections	Andronikos Skiadopoulos	Skiadopoulos, Andronikos; de Castro e Sousa, Albano; Lignos, Dimitrios
15:30-15:45			
15:45-16:00			

PARALLEL SESSION 7 (PS-7) - Day 3 - 14:00-16:00

PS-7g | Masts and towers, Offshore Structures | Room 6 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	A Fourier-series numerical approach for the analysis of tubular members	Sandor Adany	Adany, Sandor; Schafer, Ben
14:15-14:30	Buckling behavior of tubes subjected to combined bending and torsion	Sandor Adany	Ding, Victoria; Adany, Sandor; Torabian, Shahab; Pervizaj, Anil; Schafer, Ben
14:30-14:45	Evaluation of Seismic Performance of Offshore Wind Turbine Foundations with Slip Joints by Large Shaking Table Tests	Yoko Soya	Soya, Yoko; Matsuki, Satoshi; Yamasawa, Tetsuya; Arai, Nanae; Fujii, Ayumi; Suzuki, Yoshitaka; Sako, Yuji
14:45-15:00	Finite Element Modelling of a Transmission Steel Lattice Tower Based on LiDAR Point Cloud Data	Filip Wrzosek	Wrzosek, Filip
15:00-15:15	Numerical modelling of the Self-Erecting Tower for onshore wind turbines	Mariela de Los Angeles Mendez Morales	Gascon Merino, Pablo; Mendez Morales, Mariela; Rebelo, Carlos
15:15-15:30	Fatigue behaviour of hybrid grouted joints under axial loading	Jakob Boretzki	Boretzki, Jakob; Albiez, Matthias; Damm, Jannis; Ummerhofer, Thomas
15:30-15:45	Fatigue strength of tubular welded connections in offshore floating platforms	Theocharis Papatheocharis	Papatheocharis, Theocharis; Plakias, George; Zervaki, Anna; Karamanos, Spyros; Perdikaris, Philip
15:45-16:00	Digital Twin-Based Deterioration Prognosis of Steel Wind Turbine Towers in Modular Energy Islands	Junlin Heng	Heng, Junlin; Zhang, Jiaxin; Kaewunruen, Sakdirat; Dong, You; Charalampous, Baniotopoulos

PS-7h | Eurocode and international design codes | Room 7 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Towards a practicable GMNIA procedure in the footsteps of the Direct Design Method	Lauri Jaamala	Jaamala, Lauri; Mela, Kristo
14:15-14:30	General method for I-section stainless steel beam-columns	Flávio Arrais	Arrais, Flávio; Jandera, Michal
14:30-14:45	Reassessment of Operating Engineering Steel Structures with the First Order Reliability Method and Bayesian Inference	Sharmistha Chowdhury	Chowdhury, Sharmistha; Arnold, Robert; Kraus, Matthias
14:45-15:00	Design assisted by finite element analysis – Introduction to the new prEN 1993-1-14 and Technical Report	Balázs Kövesdi	Dunai, László; Kövesdi, Balázs; Gardner, Leroy; Al-Emrani, Mohammad; Casafont, Miquel; Degée, Hervé; Jandera, Michal; Kuhlmann, Ulrike; Taras, Andreas; Walport, Fiona
15:00-15:15	Second Generation of Eurocode 8: Seismic Design Rules for Cold-Formed Steel Buildings	Luigi Fiorino	Landolfo, Raffaele; Fiorino, Luigi
15:15-15:30	Cellular beams and prEN 1993-1-13: an opportunity to address environmental challenges	Antoine Glorieux	Glorieux, Antoine; Hanus, François
15:30-15:45	Moment Resisting Frames under the light of Japanese and European Codes	Maria Maglio	Maglio, Maria; Nastro, Elide; Piluso, Vincenzo; Sabatino, Simona; Sato, Atsushi
15:45-16:00			

PS-7i | Fire resistance and structural robustness | Room 8 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Compressive arch action in beams of steel frames subjected to a column loss	Tudor Golea	Golea, Tudor; Vermeylen, Maxime; Jaspert, Jean-Pierre; Demonceau, Jean-François
14:15-14:30	Numerical investigation of a steel tied arch bridge under fire loading	Patrick Covi	Covi, Patrick; Tondini, Nicola
14:30-14:45	Finite element study on the behaviour of free from damage connections under fire	Ana Francisca Henriques Parente dos Santos	Santos, Ana Francisca; Santiago, Aldina; Craveiro, Helder; Simoes da Silva, Luis
14:45-15:00	Influence of load and high temperature on the post-fire behaviour of high-strength structural steels	Andrés Lapuebla-Ferri / David Pons	Lapuebla-Ferri, Andrés; Pons, David; Romero, Manuel L.; Gardner, Leroy
15:00-15:15	Experimental evaluation of the load-bearing capacity of steel-reinforced CFST stub columns under a fire scenario	Ana Espinós	Medall, David; Ibáñez, Carmen; Espinós, Ana; Romero, Manuel L.
15:15-15:30	Study on the fire performance of novel G550 galvanized steel-concrete composite slabs	Yun Cheng	Yun, Cheng; YU, Xianglin; Yong-jiu, SHI
15:30-15:45	Experimental investigations on the load-bearing behaviour of shear studs in trapezoidal sheet in fire	Kurt Tutzer	Tutzer, Kurt; Kaul, Mathias; Mensinger, Martin
15:45-16:00			

PARALLEL SESSION 7 (PS-7) - Day 3 - 14:00-16:00

PS-7j | Seismic resistance, dynamics and vibration | Room 9 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Seismic behaviour of dissipative beam-to-column steel and steel-concrete composite joints	Georgios Skarmoutsos	Skarmoutsos, Georgios; Kuhlmann, Ulrike
14:15-14:30	Seismic performance of multistory chevron-braced steel structures with yielding beams	Ahmet Alperen Orgev	Orgev, Ahmet Alperen; Selamet, Serdar; Vatansever, Cuneyt
14:30-14:45	Seismic Design of Non-Structural Components in Industrial Facilities – a Discussion of the EC8 Approach	Peter Knoedel	Knoedel, Peter
14:45-15:00	Theory of Plastic Mechanism Control for Linked Column Frames	Vincenzo Piluso	Montuori, Rosario; Nastri, Elide; Piluso, Vincenzo; Pisapia, Alessandro
15:00-15:15	Study on ultra-low cycle fatigue fracture of thick-walled steel bridge piers	Shuailing Li	Li, Shuailing; Zhuge, Hanqing; Xie, Xu
15:15-15:30	Measures to Improve Seismic Resistance by Fuse Mechanism in Pier Structures	Minoru Sekiguchi	Sekiguchi, Minoru; Taniguchi, Nozomu; Kobayashi, Kaoru
15:30-15:45			
15:45-16:00			

PS-7k | Reuse and Retrofitting of Structural Element | Room 10 | Day 3 - 14:00-16:00

Chairperson: TBD

Time	Title	Speaker	Authors
14:00-14:15	Truss bridge design with reclaimed steel elements by performing a stock-constrained shape and topology optimisation.	Fé Lookeren Campagne	Lookeren Campagne, Fé; Sonneveld, Michelle; van der Meer, Frans; Noteboom, Chris; Kavoura, Florentia
14:15-14:30	Prediction of prestress level in the steel structures strengthened by bonded Fe-SMA strips	Lingzhen Li	Li, Lingzhen; Wang, Sizhe; Chatzi, Eleni; Motavalli, Masoud; Ghafoori, Elyas
14:30-14:45	Research and outlook of steel beam-to-column joints retrofitted by welding haunches	Huatian Zhao	Zhao, Huatian; Shi, Gang
14:45-15:00	Modal analysis of a riveted lattice beam for improved retrofitting operations	Hannah Franz	Franz, Hannah; Chataigner, Sylvain; Dieng, Lamine; Rinke, Mario
15:00-15:15	Directly Reusable Steel Column Base Connection - Concept and Numerical investigation	Aswin Kumar Jeyabalan	Jeyabalan, Aswin Kumar; Selvaraj, Sivaganesh; Chan, Tak-Ming
15:15-15:30			
15:30-15:45			
15:45-16:00			