

STESSA 2015

THE EIGHTH INTERNATIONAL CONFERENCE ON BEHAVIOUR OF STEEL
STRUCTURES IN SEISMIC AREAS

Shanghai, China, July 1-4, 2015

PROGRAM



Conference Organizers

Tongji University, Shanghai, China;

University of Naples “FEDERICO II”, Naples, Italy

With supports by

State Key Laboratory of Disaster Reduction in Civil Engineering,
Tongji University, Shanghai, China;

China Steel Construction Society;

China Construction Metal Structure Association, Steel Construction
Sub-association;

Shanghai Metal Construction Society

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Organizations

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In total 30 members from 18 countries: Austria, Canada, Chile, China, Colombia, France, Greece, Italy, Japan, Korea, Mexico, Portugal, Romania, Spain, Switzerland, Turkey, United Kingdom and USA.

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Conference Information

Background and Objective

STESSA is the international specialty conference focused on the seismic design of steel structures. The STESSA Conference aims to enable researchers and engineers to present and assess the results from recent research on minimization of the earthquake damage, on seismic retrofit, and on the collapse behavior of steel structures. In addition, numerous research projects on steel structures using recently-commissioned large-scale earthquake simulation facilities are disseminated in the conference. STESSA is held every three years. The previous conferences were held in Timisoara (Romania 1994), Kyoto (Japan 1997), Montreal (Canada 2000), Naples (Italy 2003), Yokohama (Japan 2006), Philadelphia (United States 2009), and Santiago (Chile 2012). The main mission of STESSA conferences is to provide an opportunity for researchers and engineers to share their research, technology and expertise with their peers at an international forum.

Following the great success of previous conferences, Tongji University was selected to host the 8th International Conference on Behavior of Steel Structures in Seismic Areas (STESSA 2015) in Shanghai on July 1-4, 2015.

Conference Themes

The results of recent research from all over the world in the field of steel structures in seismic areas will be represented in STESSA15 by experts from 25 countries. The papers are subdivided into the following working sessions.

- Performance-Based Design of Structures;
- Resilience Enhancement Technology;
- Member Behaviour;
- Connection Behaviour;
- Global Behaviour;
- Analytical and Experimental Methods;
- Mixed and Composite Structures;
- Passive, Semi-active and Active Control;
- Codification, Design, and Practice;
- Earthquake, Wind and Exceptional Loads.

Conference Venue and Transportation

The Conference will be held at the Tongji Architectural Design (TJAD) (Group) Co., Ltd.

Address: No. 1230 Siping Road, Shanghai, 200092, China

There are two airports in Shanghai: Pudong International Airport (**PVG**) and Hongqiao International Airport (**SHA**). Taking a taxi will cost you around 200/100RMB from PVG/SHA to the conference venue. From Hongqiao International Airport, you may also take the Metro Line 10 and get off at the stop of **Tongji University**, which will take you about 1 hour. The conference venue is within walking distance from the Metro stop. The public transportation from Pudong International Airport to Tongji University will take you more than 2 hours with several transfers. You may take Metro Line 2 from Pudong International Airport and change to another Metro Line 2 at **Guanglan Road (广兰路) Stop**, afterwards transfer Metro Line 10 at **East Nanjing Road (南京东路) Stop** and get off at the stop of **Tongji University**. Another alternative is that you can take Airport Bus 4 and get off at **Wujiaochang (五角场) Stop**, then walk around 430m to transfer Metro Line 10 at Wujiaochang Stop and get off at the stop of **Tongji University**.

On-site Registration

Onsite Registration Hours:

Kingswell Hotel Tongji	Tuesday, June 30	14:00 – 21:00
Conference Venue (TJAD)	Wednesday, July 1	7:30 – 17:30
	Thursday, July 2	8:00 – 17:30
	Friday, July 3	8:00 – 15:30

Onsite Registration fees:

Delegate	USD 700
Student	USD 450
Accompanying person	USD 200

Note: Payment by cash or card.

Breaks / Lunches

Break stations to provide tea and coffee are located close to the session rooms. Lunches are provided on July 1 (Wednesday), July 2 (Thursday) and July 3 (Friday) at the Conference Venue. Lunch vouchers can be found in your registration package.

Reception Party and Conference Banquet

Reception Party	Kingswell Hotel Tongji	July 1 18:30 – 20:30	No.50 Zhangwu Road (near conference venue)
Conference Banquet	Shanghai International Conference Center	July 2 19:15-21:30	No. 2727 Binjiang Road

Presentation of Papers

Oral presentation:

English should be used for presentations and discussions. Each keynote speaker is allowed 25 minutes for presentation and 5 minutes for discussion. All the other speakers are allowed 12 minutes for presentation and 3 minutes for discussion. Please copy your PPT document to the conference organizing committee at least one day before your oral presentation.

Poster Presentation:

The posters will be on exhibition at the hallway between Main Hall and Exhibition Hall throughout the conference. Poster presenters are requested to mount their posters before 9:50 a.m. on July 1st on the provided boards in the right zone (classification of sessions see Page 11). Eight poster sessions are planned combined with Coffee breaks. Authors of the posters are encouraged to be at their posters during the breaks for Q&A discussion, where the authors of Poster Sessions 1-3 are arranged on the first day of the Conference, Poster Sessions 4-6 on the second day and Poster Sessions 7-8 on the third day.

Accommodation

Hotels nearby the conference venue are mentioned on the conference website where reservation forms are provided. Please get reservations by yourself.

Internet

There are computers for use at the secretariat of the conference.

Username of Wi-Fi: tj022a

Password of Wi-Fi: tj022a

Currency

The current exchange rate is US\$1 = RMB\$6.2 approximately. Most foreign currencies can be freely exchanged at banks and hotels.

Electricity

The voltage and frequency used in Shanghai are 220 volts and 50 Hz, respectively.

Weather

The average temperature of Shanghai at the beginning of July is shown below:

Average High Temperature: 28°C; Average Low Temperature: 22°C

Plan of Sites

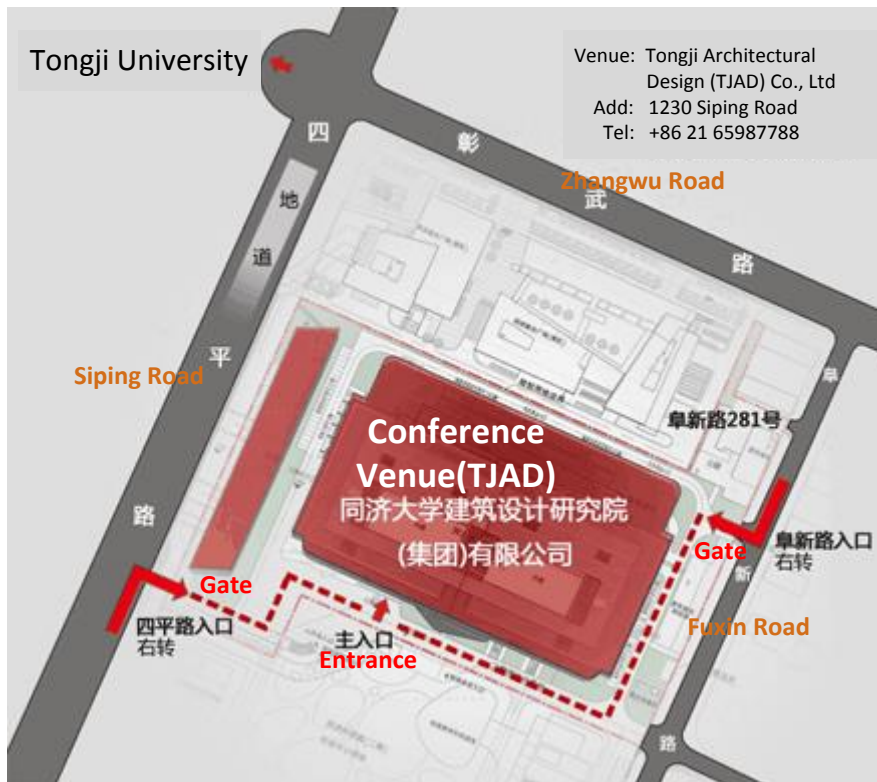


STESSA2015 Conference Venue (TJAD) and Nearby Hotels

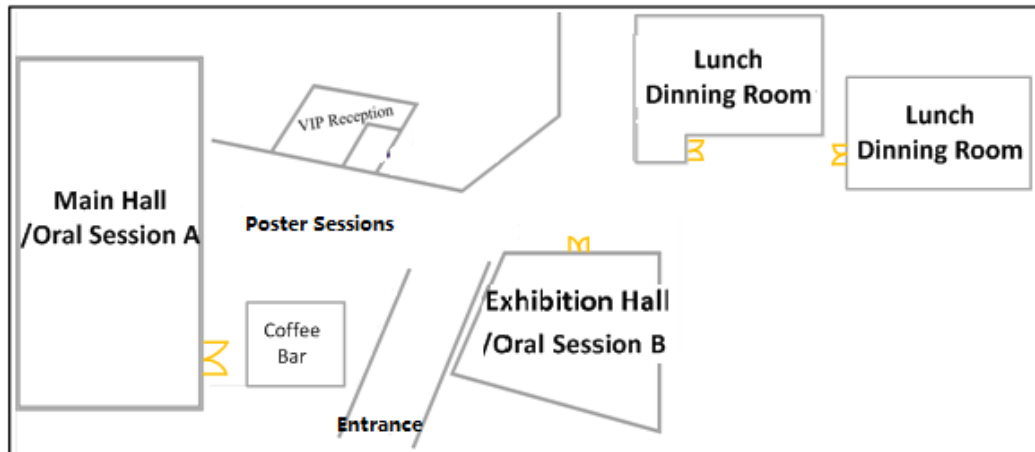
Note: Four hotels are recommended on the conference website of which three are shown in this map. The Crown Plaza Fudan hotel (5-star) not showed in this map will take 25-35 mins by walk and 10 mins by taxi to the conference venue.



Route from Conference Venue (TJAD) to venue of Chinese symposium (Civil Engineering Building)



The conference venue



Arrangement of presentation halls at TJAD (on the ground floor)

Program Overview

Part 1: Oral Sessions

July 1, 2015			
8:30-9:00	Opening Ceremony (Main Hall)		
9:00-10:00	Plenary Session 1: Keynote Lectures (Main Hall)		
10:00-10:20	Coffee Break		
10:20-12:35	Session A1: Resilience Enhancement Technology (Main Hall)	Session B1: Member Behaviour 1 (Exhibition Hall)	
12:30-13:30	Lunch: Dining Hall, Office Building(1F), TJAD		
13:30-15:30	Session A2: Global Behaviour 1 (Main Hall)	Session B2: Member Behaviour 2 (Exhibition Hall)	
15:30-15:50	Coffee Break		
15:50-18:05	Session A3: Global Behaviour 2 (Main Hall)	Session B3: Member Behaviour 3 (Exhibition Hall)	
18:30-20:30	Reception: Kingswell Hotel Tongji		
July 2, 2015			
8:30-9:30	Plenary Session 2: Keynote Lectures (Main Hall)		
9:30-9:50	Coffee Break		
9:50-12:35	Session A4: Connection Behaviour 1 (Main Hall)	Session B4: Performance-Based Design of Structures / Composite Structures (Exhibition Hall)	Session C1: Chinese Symposium (Civil Engineering Building)
12:30-13:30	Lunch: Dining Hall, Office Building(1F), TJAD		
13:30-15:30	Session A5: Global Behaviour 3 (Main Hall)	Session B5: Member Behaviour 4 (Exhibition Hall)	Session C2: Chinese Symposium (Civil Engineering Building)
15:30-15:50	Coffee Break		
15:50-18:05	Session A6: Codification, Design, and Practice 1 (Main Hall)	Session B6: Analytical and Experimental Methods 1 (Exhibition Hall)	Session C3: Chinese Symposium (Civil Engineering Building)

19:15-21:30	Banquet: Shanghai International Conference Center (The buses will depart at 18:15 p.m. from the conference venue (TJAD).)		
July 3, 2015			
8:30-9:30	Plenary Session 3: Keynote Lectures (Main Hall)		
9:30-9:50	Coffee Break		
9:50-12:20	Session A7: Connection Behaviour 2 (Main Hall)	Session B7: Passive, Semi-active and Active Control (Exhibition Hall)	Session C4 : Chinese Symposium (Civil Engineering Building)
12:30-13:30	Lunch: Dining Hall, Office Building(1F), TJAD		
13:30-15:30	Session A8: Connection Behaviour 3 (Main Hall)	Session B8: Analytical and Experimental Methods 2 (Exhibition Hall)	Session C5: Chinese Symposium (Civil Engineering Building)
15:30-15:50	Coffee Break		
15:50-17:50	Session A9: Codification, Design, and Practice 2/ Seismic, Wind and Exceptional Loads (Main Hall)	Session B9: Analytical and Experimental Methods 3 (Exhibition Hall)	Session C6: Chinese Symposium (Civil Engineering Building)
17:50-18:10	Closing Ceremony (Main Hall)		
July 4, 2015			
9:30-17:00	Technical Visits		
Morning	TV1 : The Multi-functional Shaking Tables Lab of Tongji University (The buses will depart at 9:30 a.m. from Kingswell Hotel Tongji. Please bring your badge and wear comfortable shoes.)		
Afternoon	TV2 : The New World Exposition Museum, Shanghai		

Part 2: Poster Sessions

Location: Hallway between Main Hall and Exhibition Hall

July 1, 2015	10:00-10:20;15:30-15:50	Session 1: Performance-Based Design of Structures
		Session 2: Member Behaviour
		Session 3: Connection Behaviour
July 2, 2015	9:30-9:50; 15:30-15:50	Session 4: Global Behaviour
		Session 5: Analytical and Experimental Methods
		Session 6: Passive, Semi-active and Active Control
July 3, 2015	9:30-9:50; 15:30-15:50	Session 7: Codification, Design, and Practice
		Session 8: Seismic, Wind and Exceptional Loads

Note:

The poster sessions are planned combined with Coffee breaks. Authors of the posters are encouraged to be at their posters during the breaks for Q&A discussion.

Oral Sessions of STESSA 2015

July 1, 2015	
8:30-9:00	Opening Ceremony (Main Hall) Chairman: Prof. Guo-Qiang Li
Plenary Session 1: Keynote Lectures (Main Hall) Chairman: Prof. Stephen Mahin	
9:00-9:30	Major Development of Research and Practices on Seismic Design of Steel Building Structures in China <i>Zu-Yan Shen*</i>
9:30-10:00	Hybrid Analytical-Experimental Simulation and Applications to Steel Frames with Semi-Rigid Connections <i>Amr S. Elnashai*, Hussam N. Mahmoud</i>
10:00-10:20	Coffee Break
Session A1: Resilience Enhancement Technology (Main Hall) Chairmen: Prof. Roberto T. Leon and Prof. Richard Sause	
10:20-10:35	Self-Centering Steel Plate Shear Walls for Improving Seismic Resilience <i>Patricia M. Clayton*, Daniel M. Dowden, Chao-Hsien Li, Jeffrey W. Berman, Michel Bruneau, Laura N. Lowes, Keh-Chyuan Tsai</i>
10:35-10:50	Influence of Member Inelasticity on the Performance of Controlled Rocking Steel Braced Frames <i>Taylor C. Steele*, Lydell D. A. Wiebe</i>
10:50-11:05	Experimental Study of Restoring Force Mechanism in Self-Centering Beam (SCB) <i>Abhilasha Maurya, Matthew R. Eatherton*</i>
11:05-11:20	Large-Scale Tests on a Re-Centring Dual Eccentrically Braced Frame <i>Aurel Stratan*, Adriana Ioan, Dan Dubina, Martin Poljanšek, Javier Molina, Pierre Pegon, Fabio Taucer, Gabriel Sabău</i>
11:20-11:35	Seismic Design of Novel Steel Resilient Structures <i>T. Y. Yang, D. P. Tung*, Yuanjie Li</i>
11:35-11:50	Development and Validation of a Steel Dual-Core Self-Centering Brace for Seismic Resistance: From Brace Member to One-Story One-Bay Braced Frame Tests <i>Chung-Che Chou*, Ping-Ting Chung, Tsung-Han Wu, Alexis Rafael Ovalle Beato</i>
11:50-12:05	Full-Scale Cyclic Testing of a Low-Ductility Concentrically-Braced Frame <i>Joshua G. Sizemore, Larry A. Fahnestock*, Eric M. Hines, Cameron R. Bradley</i>
12:05-12:20	Experimental Investigation of Seismic Behavior of Steel Building Structure with Nonlinear Viscous Dampers Using Real-Time Hybrid Earthquake Simulation <i>Baiping Dong*, Richard Sause, James M. Ricles</i>
12:20-12:35	Braced Frame Using Asymmetrical Friction Connections (AFC) <i>J. Chanchi Golondrino, R. Xie*, G. A. MacRae, G. Chase, G. Rodgers, C. Clifton</i>

Session B1: Member Behaviour 1 (Exhibition Hall) Chairmen: Prof. Lu  Calado and Prof. Satoshi Yamada	
10:20-10:35	Out-of-Plane Stability Assessment of Buckling-Restrained Braces with Chevron Configurations <i>Toru Takeuchi*</i> , <i>Ryota Matsui</i> , <i>Saki Mihara</i>
10:35-10:50	Application and Modification of Shibata–Wakabayashi Model to Simulation of Buckling Hysteresis Loop of Steel Braces <i>Ryota Matsui*</i> , <i>Toru Takeuchi</i>
10:50-11:05	Subassemblage Testing of All-Steel Web-Restrained Braces <i>Johnn Judd*</i> , <i>Adam Phillips</i> , <i>Matthew Eatherton</i> , <i>Finley Charney</i> , <i>Igor Marinovic</i> , <i>Clifton Hyder</i>
11:05-11:20	Effectiveness of Buckling Restrained Braces on an Industrial Structure <i>Ricardo A. Herrera*</i> , <i>Karina Santelices</i>
11:20-11:35	The Buckling-Restrained Brace with High Fatigue Performance <i>Kazuhisa Koyano*</i> , <i>Shuichi Koide</i> , <i>Kazuaki Miyagawa</i> , <i>Mamoru Iwata</i>
11:35-11:50	Seismic Behavior of Short-Core Buckling Restrained Braces <i>Nader Hoveidae*</i> , <i>Behzad Rafezy</i>
11:50-12:05	A Cloud Service for Automated Design of Seismic Buckling-Restrained Braces and Connections <i>Ming-Chieh Chuang*</i> , <i>Keh-Chyuan Tsai</i> , <i>Pao-Chun Lin</i> , <i>An-Chien Wu</i>
12:05-12:20	Lateral-Torsional Buckling Capacity of Tapered-Flange Moment Frame Shapes <i>Leah S. O'Neill</i> , <i>Trevor A. Jones</i> , <i>Paul W.Richards*</i>
12:20-12:35	Analysis on Secondary Stresses on Main Material of Narrow Base Tubular Transmission Tower <i>Bin Huang*</i> , <i>Hong-Zhou Deng</i> , <i>Yun Wu</i> , <i>Tian-You Li</i>
12:30-13:30	Lunch
Session A2: Global Behaviour 1 (Main Hall) Chairmen: Prof. Gian Andrea Rassati and Assoc. Prof. Charles Clifton	
13:30-13:45	Collapse Assessment of a 4-Story Buckling Restrained Knee Braced Truss Moment Frame System <i>T. Y. Yang*</i> , <i>Yuanjie Li</i>
13:45-14:00	Effect of Column Splice Location on Seismic Demands in Steel Moment Frames Considering Splice Flexibility <i>Fahimeh Tork Ladani*</i> , <i>Gregory MacRae</i> , <i>J. Geoffery Chase</i>
14:00-14:15	Composite Slab Effects on Beam-Column Subassembly Seismic Performance <i>Tushar D. Chaudhari*</i> , <i>Gregory A. MacRae</i> , <i>Desmond Bull</i> , <i>Geoffrey Chase</i> , <i>Stephen Hicks</i> , <i>George C. Clifton</i> , <i>Michael Hobbs</i>
14:15-14:30	Structural Behavior of Steel Frame with Low Joint Efficiency of Beam Web <i>Norihito Miki*</i> , <i>Masahiro Nohsho</i> , <i>Satoshi Yamada</i> , <i>Shoichi Kishiki</i> , <i>Takashi Hasegawa</i>
14:30-14:45	Analytical Study Comparing the Seismic Behavior of Partially Restrained Steel Moment Frames to Fully Restrained Steel Moment Frames <i>Derek A. Marucci</i> , <i>James A. Swanson*</i> , <i>Gian A. Rassati</i>

14:45-15:00	Seismic Performance of Controlled Spine Frame with Energy-Dissipating Members <i>Xingchen Chen*</i> , <i>Toru Takeuchi</i> , <i>Ryota Matsui</i>
15:00-15:15	Influence of Detailing of Short Link on Seismic Response of Eccentrically Braced Frames <i>Adina Vataman</i> , <i>Daniel Grecea*</i> , <i>Adrian Ciutina</i>
15:15-15:30	Dual Frames of High Strength Steel RHSCF Columns for Seismic Zones <i>Dan Dubina*</i> , <i>Cristian Vulcu</i> , <i>Aurel Stratan</i> , <i>Adrian Ciutina</i>
Session B2: Member Behaviour 2 (Exhibition Hall) Chairmen: Prof. Vinceneo Piluso and Assoc. Prof. Larry A. Fahnestock	
13:30-13:45	Evaluation Method of Plastic Deformation Capacity of Steel Beam Governed by Ductile Fracture at the Toe of The Weld Access Hole <i>Satoshi Yamada*</i> , <i>Yu Jiao</i> , <i>Shoichi Kishiki</i>
13:45-14:00	Loading Protocols for Evaluating the Seismic Behavior of Steel Beams in Weak-Beam Moment Frames <i>Yu Jiao*</i> , <i>Shoichi Kishiki</i> , <i>Satoshi Yamada</i>
14:00-14:15	Cyclic Behavior of Replaceable Steel Coupling Beams <i>Xiaodong Ji*</i> , <i>Yandong Wang</i> , <i>Qifeng Ma</i> , <i>Jiaru Qian</i>
14:15-14:30	Lateral Buckling Behavior of Wide-Flange Beams with Concrete Floor Slab Subjected to Cyclic Bending Moment: Part 1 Experiment <i>Yuji Koetaka*</i> , <i>Haruna Iga</i> , <i>Jun Iyama</i> , <i>Takashi Hasegawa</i>
14:30-14:45	Lateral Buckling Behavior of Wide-Flange Beams with Concrete Floor Slab Subjected to Cyclic Bending Moment: Part 2 Finite Element Analysis <i>Jun Iyama*</i> , <i>Yuji Koetaka</i> , <i>Takashi Hasegawa</i>
14:45-15:00	Behaviour of Steel I-Beams with Web Openings <i>Luis Calado*</i>
15:00-15:15	Seismic Behavior of Concrete Filled Steel Tubes Subjected to Cyclic Torsion <i>Yu-Hang Wang*</i> , <i>Jian-Guo Nie</i> , <i>Jian-Sheng Fan</i>
15:15-15:30	On the Use of Perforated Metal Shear Panels for Seismic-Resistant Applications <i>A. Formisano*</i> , <i>L. Lombardi</i> , <i>F. M. Mazzolani</i>
15:30-15:50	Coffee Break
Session A3: Global Behaviour 2 (Main Hall) Chairman: Prof. Francisco López-Almansa and Dr. Ricardo Herrera	
15:50-16:05	Seismic Performance of Dual Frames with Steel Panels <i>Calin Neagu</i> , <i>Florea Dinu*</i> , <i>Dan Dubina</i>
16:05-16:20	Influence of Semi-Rigid Connections on the Seismic Behaviour of Braced Frames with Buckling Restrained Braces <i>Melina Bosco*</i> , <i>Edoardo M. Marino</i> , <i>Pier Paolo Rossi</i> , <i>Paola R. Stramondo</i>
16:20-16:35	Seismic Performance Assessment of a Tall Building Having Pre-Northridge Moment-Resisting Connections <i>Jiun-Wei Lai</i> , <i>Matthew Schoettler</i> , <i>Shanshan Wang</i> , <i>Stephen A. Mahin*</i>

16:35-16:50	Seismic Performance Evaluation of Existing High-Rise Steel Building Subjected to Long-Period Ground Motion and Assessment of Retrofit by Steel Dampers <i>D. Sato*</i> , <i>T. Nagae</i> , <i>H. Kitamura</i> , <i>M. Nakagawa</i> , <i>K. Sukemura</i> , <i>K. Kajiwara</i>
16:50-17:05	The Optimization of Steel Braced Frame Structure Based on High Strength Steel <i>Guochang Li</i> , <i>Yuwei An</i> , <i>Zhijian Yang</i>
17:05-17:20	Cyclic Loading Test of Substructure Frame with New Column Support System for Steel Moment Resisting Structures to Perform Beam Yielding Mechanism <i>Sachi Furukawa*</i> , <i>Yoshihiro Kimura</i> , <i>Katsunori Kaneda</i> , <i>Akira Wada</i>
17:20-17:35	Evaluation of Low- and Medium-Rise Buildings Enhanced Seismic Performance by High-Strength Steel and Hysteretic Dampers <i>Yasunari Watanabe*</i> , <i>Toshiaki Sato</i> , <i>Haruyuki Kitamura</i> , <i>Kazuaki Miyagawa</i> , <i>Takuya Ueki</i>
17:35-17:50	On the Weak Storey Behaviour of Concentrically Braced Frames <i>Daniel B. Merczel*</i> , <i>Jean-Marie Aribert</i> , <i>Hugues Somja</i> , <i>Mohammed Hjiij</i> , <i>János Lógó</i>
Session B3: Member Behaviour 3 (Exhibition Hall) Chairmen: Prof. Jose Miguel Castro and Prof. Alberto Mandara	
15:50-16:05	Simulation of Hysteretic Behavior of RHS Columns under Bi-Directional Horizontal Forces and Constant Axial Force <i>Takanori Ishida*</i> , <i>Yuko Shimada</i> , <i>Satoshi Yamada</i>
16:05-16:20	Seismic Behavior of Large-Section Rectangular CFT Columns with Distributive Beam and Inner Diaphragms <i>Yuanzhi Zhang*</i> , <i>Jinhui Luo</i> , <i>Yuanqi Li</i> , <i>Zuyan Shen</i> , <i>Xueyi Fu</i>
16:20-16:35	Plastic Deformation Capacity of RHS Column with Weld Defects <i>Masayuki Takakura*</i> , <i>Tsuyoshi Tanaka</i> , <i>Hayato Asada</i> , <i>Ryo Ueta</i>
16:35-16:50	Studies on Axially Compressed SRC Column Using Q460 High-Strength Steel <i>Suwen Chen</i> , <i>Pei Wu*</i> , <i>Qing Liu</i> , <i>Zhao-Xin Hou</i> , <i>Lin-Bo Qiu</i>
16:50-17:05	Research on the Hysteretic Behaviors of Cold-Formed Thick-Walled Steel Columns under the Axial Cyclic Loading <i>Xiaochao Fu*</i> , <i>Yuanqi Li</i>
17:05-17:20	Detection of Nonlinear Behavior in Exposed Column Bases Using the Second Time Derivative of Absolute Acceleration <i>Masaki Wakui*</i> , <i>Jun Iyama</i> , <i>Tsuyoshi Koyama</i>
17:20-17:35	Experimental Investigation on Stability Behavior of Q420 High Strength Steel Y-Section Columns <i>Hong-Zhou Deng</i> , <i>Xiang-Lin Yu*</i> , <i>Ming-Yu Wei</i>
17:35-17:50	Seismic Behaviour of X Bracings: Analysis of Models and Design Criteria <i>Antonio Formisano</i> , <i>Beatrice Faggiano*</i> , <i>Giuseppe Marino</i> , <i>Federico M. Mazzolani</i>
17:50-18:05	Experimental Assessment of the Behavior of Rubberized Concrete Filled Steel Tube Members <i>Y. Jiang*</i> , <i>A. Silva</i> , <i>J. M. Castro</i> , <i>R. Monteiro</i>

18:30-20:30

Reception: Kingswell Hotel Tongji

July 2, 2015	
Plenary Session 2: Keynote Lectures (Main Hall) Chairman: Prof. Akira Wada	
8:30-9:00	Ten Years of E-Defense Activities — Collapse, Functionality, and Resilience <i>Masayoshi Nakashima*</i> , <i>Taichiro Okazaki</i>
9:00-9:30	The Activities of the ECCS-TC13 Seismic Committee: Bridging the Gap Between Research and Standards <i>Raffaele Landolfo*</i>
9:30-9:50	Coffee Break
Session A4: Connection Behaviour 1 (Main Hall) Chairmen: Prof. Dimitrios Lignos and Prof. Zhengqing Chen	
9:50-10:05	<i>Finite Element Analysis of Column Base Weak Axis Aligned Asymmetric Friction (W AFC)</i> <i>M. Hatami*</i> , <i>J. Borzouie</i> , <i>G. A. MacRae</i> , <i>M. Yekrangnia</i> , <i>S. Abubakar</i>
10:05-10:20	Column Base Weak Axis Aligned Asymmetric Friction Connection Cyclic Performance <i>J. Borzouie*</i> , <i>G. A. MacRae</i> , <i>J. G. Chase</i> , <i>G. W. Rodgers</i> , <i>G. C. Clifton</i>
10:20-10:35	Behavior of External Diaphragm Connections for Square CFST Columns under Bidirectional Loading <i>Helmy Tjahjanto*</i> , <i>Gregory MacRae</i> , <i>Anthony Abu</i> , <i>Charles Clifton</i> , <i>Tessa Beetham</i> , <i>Nandor Mago</i>
10:35-10:50	A Finite Element Investigation of Skewed and Sloped Moment Connections in Steel Construction <i>Kevin E. Wilson</i> , <i>Gian A. Rassati*</i> , <i>James A. Swanson</i>
10:50-11:05	Experimental Investigation on Behavior of Cast Steel Connectors for Beam-to-Column Connections under Cyclic Loading <i>Ying-Zhi Chen*</i> , <i>Le-Wei Tong</i> , <i>Yi-Yi Chen</i>
11:05-11:20	Improving the Seismic Behaviour of the Sliding Hinge Joint Using Belleville Springs <i>Shahab Ramhormozian*</i> , <i>G. Charles Clifton</i> , <i>Gregory A. MacRae</i> , <i>Hsen-Han Khoo</i>
11:20-11:35	The Optimum Use of Belleville Springs in the Asymmetric Friction Connection <i>Shahab Ramhormozian*</i> , <i>G. Charles Clifton</i> , <i>Gregory A. MacRae</i> , <i>Hsen-Han Khoo</i>
11:35-11:50	Numerical Study on Mechanical Behavior of Shear Plate in Web-Clamped Type Beam-to-Column Connection <i>Keita Araki*</i> , <i>Jun Iyama</i> , <i>Shiwan Piao</i>
11:50-12:05	Experimental Program and Numerical Simulations of Bolted Beam to Column Joints with Haunches <i>Cosmin Maris</i> , <i>Cristian Vulcu*</i> , <i>Aurel Stratan</i> , <i>Dan Dubina</i>
12:05-12:20	Full Scale Testing of Extended Beam-to-Column and Beam-to-Girder Shear Tab Connections Subjected to Shear <i>Jacob Hertz</i> , <i>Dimitrios G. Lignos*</i> , <i>Colin A. Rogers</i>

Session B4: Performance-Based Design of Structures / Composite Structures (Exhibition Hall)	
Chairmen: Prof. James Ricles and Prof. Yongfeng Luo	
9:50-10:05	Cyclic Loading Test on the Shearing Behavior of Welded Box Section Columns with Concrete Filled <i>Zhiqiang Li*</i> , <i>Yiyi Chen</i> , <i>Wei Wang</i>
10:05-10:20	Diaphragm Behavior of Deconstructable Composite Floor Systems <i>Lizhong Wang</i> , <i>Mark D. Webster</i> , <i>Jerome F. Hajjar*</i>
10:20-10:35	Hysteretic Behaviour of Concrete-Filled Double-Skin Stainless Steel Tube Beam-Columns <i>Ying-Fei Li*</i> , <i>Feng Zhou</i>
10:35-10:50	Effects of Out of Plane Strength and Stiffness of Composite Floor Slabs on the Inelastic Response of Eccentrically Braced Frame Structures <i>Amin Momtahan</i> , <i>Charles Clifton*</i>
10:50-11:05	Behavior of the Composite Steel-Timber Structure with Semi-Rigid Joint <i>Masanori Fujita*</i> , <i>Tomomichi Hayashi</i> , <i>Yuki Okoshi</i> , <i>Mamoru Iwata</i>
11:05-11:20	Investigation on the Seismic Behavior of Concrete-Filled Steel Plate Composite Coupling Beams <i>Hong-Song Hu*</i> , <i>Jian-Guo Nie</i>
11:20-11:35	An Energy-Based Nonlinear Static Procedure for Estimating the Seismic Response of Hybrid Steel Moment Resisting Frames <i>Ke Ke*</i> , <i>Yi-Yi Chen</i> , <i>Guang-Hong Chuan</i>
11:35-11:50	Seismic Design of Multistory Tension-Only Concentrically Braced Beam-Through Frames Aimed at Uniform Inter-Story Drift <i>Chao Zou*</i> , <i>Wei Wang</i> , <i>Yiyi Chen</i> , <i>Yunfeng Zhang</i>
11:50-12:05	Comparison Between Criteria for Selecting The Parameters of Hysteretic Energy Dissipators for Seismic Protection of Steel Building Structures <i>David Dom ínguez</i> , <i>Francisco López-Almansa*</i> , <i>Amadeo Benavent-Climent</i>
12:05-12:20	Direct Displacement Based Design: Application for Steel Moment Resisting Frames with CLT Infill Walls <i>Matiyas Ayalew Bezabeh*</i> , <i>Solomon Tesfamariam</i> , <i>Siegfried F. Stiemer</i>
12:20-12:35	Fragility and Seismic Behaviour of Pre- and Post-Retrofit Concentrically Braced Frames <i>Lucia Tirca*</i> , <i>Ovidiu Serban</i> , <i>Mingzheng Wang</i>
12:30-13:30	Lunch
Session A5: Global Behaviour 3 (Main Hall)	
Chairmen: Prof. Ioannis Vayas and Prof. Xianzhong Zhao	
13:30-13:45	Progressive Collapse of Seismic Designed Steel Moment Frames: Nonlinear Static and Dynamic Analysis <i>Massimiliano Ferraioli</i> , <i>Alberto Mandara*</i>
13:45-14:00	Influence of Seismic Detailing on the Progressive Collapse of Steel Moment Frames <i>David Cassiano</i> , <i>Mario D'Aniello</i> , <i>Carlos Rebelo*</i> , <i>Raffaele Landolfo</i> , <i>Lu í Sim ões da Silva</i>
14:00-14:15	Random Seismic Response Evaluation of Mid-Rise Buildings with Stiffness Irregularity Considering Soil-Structure Interaction Effects

	<i>H. Shakib*, F. Homaei</i>
14:15-14:30	Seismic Response of Special Concentric Braced Frames with Staggered Arrangement of Braces <i>P.C Ashwin Kumar, Abhay Kumar, Dipti Ranjan Sahoo*</i>
14:30-14:45	An Accurate Modeling Approach for Calculating the Vibration Characteristics of Steel Framed Structures with Semi-Rigid Connections <i>Halil F. Ozel*, Afsin Saritas</i>
14:45-15:00	Influence of Residual Stresses on the Performance of Special Concentrically Braced Frames <i>Taylor C. Steele*, Lydell D. A. Wiebe</i>
15:00-15:15	Seismic Performance of RC Structure Retrofitted with Steel Buckling-Restrained Braced Frame <i>An-Chien Wu*, Kuan-Yu Pan, Keh-Chyuan Tsai, Chao-Hsien Li, Pao-Chun Lin, Kung-Juin Wang, Chi-Hsuan Yang</i>
15:15-15:30	Backward seismic analysis of steel tanks <i>Patricio A. Pineda*, G. Rodolfo Saragoni</i>
Session B5: Member Behaviour 4 (Exhibition Hall) Chairmen: Prof. Jerome F. Hajjar and Prof. Daniel Dan	
13:30-13:45	Study on X-Shape Buckling Restrained Steel Plate Shear Wall with Two-Side Connections <i>Wen-Yang Liu*, Guo-Qiang Li</i>
13:45-14:00	Application of Coupled Shear Walls with Buckling-Restrained Steel Plates in High-Rise Buildings <i>Guo-Qiang Li*, Hai-Jiang Wang, Xiao-Kun Huang</i>
14:00-14:15	Numerical Investigation on the Effect of Axial Force to The Behaviour of Composite Steel Concrete Shear Walls <i>Daniel Dan*, Alexandru Fabian, Valeriu Stoian</i>
14:15-14:30	Experimental Investigation on Seismic Behavior of Cold-Formed Steel Trussing Shear Walls with Steel Sheet Sheathing <i>Huiwen Tian*, Yuanqi Li</i>
14:30-14:45	OpenSEES modeling of cold-formed steel framed gravity walls <i>G. Bian*, D. A. Padilla-Llano, J. Leng, S. G. Buonopane, C. D. Moen, B. W. Schafer</i>
14:45-15:00	Research and Application of Steel Plate Composite Shear Walls <i>Zhong Fan*, Jinjin Wang, Lili Zhang</i>
15:00-15:15	Dog-Bone Details in Seismic Resistant Steel Structures <i>Helmuth Köber*, Bogdan Cătălin Ștefănescu</i>
15:15-15:30	Experimental Study on the Torsional Restrain Effect of the Concrete Slab to Improve Ductility of H-Shaped Steel Beams Subjected to Bending Moment <i>Tsuyoshi Koyama*, Jun Iyama, Satoru Inamoto, Yuka Matsumoto, Tomoki Tamura</i>

15:30-15:50	Coffee Break
Session A6: Codification, Design, and Practice 1 (Main Hall) Chairmen: Prof. Kazuhiko Kasai and Prof. Pier Paolo Rossi	
15:50-16:05	Australian/New Zealand Standard for Composite Structures, AS/NZS 2327, Seismic Provisions Development <i>Kevin A. Cowie*</i>
16:05-16:20	Design and Application of a Minimal-Disturbance Seismic Rehabilitation Technique Composed of Light-Weight Steel Elements <i>Lei Zhang, Masahiro Kurata, Miho Sato, Oren Lavan, Masayoshi Nakashima*</i>
16:20-16:35	A Design Approach for Composite Framed Structures Using the Hybrid Force/Displacement (HFD) Design Method <i>Konstantinos A. Skalomenos*, George D. Hatzigeorgiou, Dimitri E. Beskos</i>
16:35-16:50	Seismic Design Criteria for Steel Moment Resisting Frames for Collapse Risk Mitigation <i>Ahmed Elkady, Dimitrios G. Lignos*</i>
16:50-17:05	Lessons From Steel Structures in Christchurch Earthquakes <i>Gregory MacRae, G. Charles Clifton*, Michel Bruneau, Amit Kanvinde, Sean Gardiner</i>
17:05-17:20	Structural Design Aspects of Next Generation Steel Wind Energy Structures <i>Evangelos Efthymiou*</i>
17:20-17:35	A New Strategy to Prevent Collapse of Columns in Buildings with Steel Chevron Braced Structure <i>Francesca Barbagallo, Melina Bosco, Edoardo M. Marino*, Pier Paolo Rossi</i>
17:35-17:50	Optimization of Energy-Dissipation Devices Arrangement for Seismic Retrofit of Truss Tower Structures <i>Yusuke Kinouchi, Toru Takeuchi, Ryota Matsui, Toshiyuki Ogawa, Kazuhiro Fujishita*</i>
Session B6: Analytical and Experimental Methods 1 (Exhibition Hall) Chairmen: Prof. Yuka Matsumoto and Prof. Carlos Rebelo	
15:50-16:05	Experimental Analysis of Dual-Steel Bolted T-Stubs under Monotonic and Cyclic Loading <i>Andreas Kleiner*, Ulrike Kuhlmann</i>
16:05-16:20	Experimental Studies Of Eccentrically Braced Frame with Rotational Bolted Active Links <i>Hoi Kit Leung*, G. Charles Clifton, Hsen Han Khoo, Gregory A. MacRae</i>
16:20-16:35	Large Scale Collapse Experiments of Wide Flange Steel Beam-Columns <i>Yusuke Suzuki*, Dimitrios G. Lignos</i>
16:35-16:50	Experimental Determination of Base Shear from Full-Scale Shake Table Testing of Two Cold-Formed Steel Framed Buildings <i>Kara D. Peterman*, Benjamin W. Schafer</i>

16:50-17:05	Substructure Online Hybrid Test on a Steel Frame Installed with Metallic Dampers <i>Tao Wang*</i> , <i>Yufeng Du</i> , <i>Jinzhen Xie</i> , <i>Haoran Jiang</i>
17:05-17:20	Shaking Table Test on 1000kv UHV Transmission Tower-Wire Coupling System <i>Qiang Xie*</i> , <i>Yun-Zhu Cai</i> , <i>Song-Tao Xue</i>
17:20-17:35	Seismic Performance of a New Type Fish-Bone BRB: an Experimental Study <i>Liang-Jiu Jia*</i> , <i>Hanbin Ge</i> , <i>Rikuya Maruyama</i> , <i>Kazuki Shinohara</i>
17:35-17:50	Experimental Testing of a Double Acting Ring Spring System for Use in Rocking Steel Shear Walls <i>Gary S. Djojo*</i> , <i>G. Charles Clifton</i> , <i>Richard S. Henry</i> , <i>Gregory A. MacRae</i>
17:50-18:05	A Refined Theoretical Model for Predicting the Ultimate Behaviour of Bolted T-Stubs <i>Antonella B. Francavilla</i> , <i>Massimo Latour</i> , <i>Vincenzo Piluso</i> , <i>Gianvittorio Rizzano*</i>
19:15-21:30	Banquet: Shanghai International Conference Center

July 3, 2015	
Plenary Session 3: Keynote Lectures (Main Hall) Chairman: Prof. Mario Fontana	
8:30-9:00	New Zealand Research on Steel Structures in Seismic Areas <i>Gregory A. MacRae*, G. Charles Clifton</i>
9:00-9:30	The Application and Design of Viscous Dampers in Super High-Rise Building <i>Da-Sui Wang*</i>
9:30-9:50	Coffee Break
Session A7: Connection Behaviour 2 (Main Hall) Chairmen: Prof. Daniel Grecea and Prof. Feifei Sun	
9:50-10:05	Cyclic Behavior of Exposed Column Base Joints: Experimental Analysis and Mechanical Modeling <i>M. Latour*, G. Rizzano</i>
10:05-10:20	Subassemblage Tests of the In-Plane Structural Behavior of Buckling Restained Brace Welded End Connections <i>Junxian Zhao*, Zhan Wang, Fuxiong Lin</i>
10:20-10:35	Axial Strength and Deformation Demands for T-Stub Connection Components at Catenary Stage in the Beams <i>Florea Dinu, Dan Dubina, Ioan Marginean*, Calin Neagu, Ioan Petran</i>
10:35-10:50	A Step Forward in the Cyclic Assessment of the F- Δ Components Using Complete Finite Elements Models of Beam-to-Column Steel End Plate Bolted Joints <i>Hugo Augusto*, Jos é Miguel Castro, Carlos Rebelo, Lu í Sim ões da Silva</i>
10:50-11:05	Deformation Limit for Ductile Fracture in Welded Tubular Joints <i>Xudong Qian*, Aziz Ahmed</i>
11:05-11:20	Numerical Study on the Local Buckling Behavior of End-Plate Connection in Steel Gabled Frames <i>Yundong Shi*, Yiyi Chen</i>
11:20-11:35	Seismic Behavior of Braced Frame Column Base Connections <i>Yao Cui*, Shoichi Kishiki, Satoshi Yamada</i>
11:35-11:50	Ultra-Low Cycle Fatigue Demand on Coped Beam Connections under Vertical Excitations <i>Huajie Wen, Hussam Mahmoud*</i>
11:50-12:05	Three-Dimensional Numerical Simulations of Steel Concrete Composite Beam-to-Column Welded and Bolted Joints <i>Claudio Amadio*, Nader Akkad, Marco Fasan</i>
Session B7: Passive, Semi-active and Active Control (Exhibition Hall) Chairmen: Prof. Chung-Che Chou and Prof. Dan Dubina	
9:50-10:05	Research on the Damping Design Method of Pendulum-Type Tuned Mass Damper <i>Zhong-Liang Deng*, Zhong Fan, Xian-Ming Liu</i>
10:05-10:20	Damage Control of Composite Gymnasium Structures with Energy-Dissipation Roof Bearings

	<i>Yuki Terazawa*</i> , <i>Toru Takeuchi</i> , <i>Kazuhiko Narita</i> , <i>Ryota Matsui</i> , <i>Kou Maehara</i>
10:20-10:35	Control of Structural Response with a New Semi-active Viscous Damping Device <i>N. Khanmohammadi Hazaveh*</i> , <i>S. Pampanin</i> , <i>J. G. Chase</i> , <i>G. W. Rodgers</i>
10:35-10:50	Eddy Current Damping and Its Application on Seismic Responses of Steel Structures: Some New Advances <i>Zheng-Qing Chen*</i> , <i>Zhi-Wen Huang</i> , <i>Xu-Gang Hua</i> , <i>Yong-Kui Wen</i>
10:50-11:05	Seismic Retrofit of a High-Rise Steel Moment Resisting Frame Using Fluid Viscous Dampers <i>Shanshan Wang*</i> , <i>Jiun-Wei Lai</i> , <i>Matthew Schoettler</i> , <i>Stephen A. Mahin</i>
11:05-11:20	Performance Evaluation of Building Frames with Energy Dissipation Systems FUSEIS 1 <i>Georgia Dougka</i> , <i>Danai Dimakogianni</i> , <i>Ioannis Vayas*</i>
11:20-11:35	Equivalent Linearized Model of Damper Response for Seismic Design of Steel Structures with Nonlinear Viscous Dampers <i>Baiping Dong</i> , <i>Richard Sause*</i> , <i>James M. Ricles</i>
11:35-11:50	Integrated Optimal Design for Belt Truss Using Viscous Dampers in Super Tall Buildings <i>Xin Zhao*</i> , <i>Tao Shi</i>
11:50-12:05	Optimal Placement of Viscoelastic Coupling Dampers in Super Tall Buildings <i>Xin Zhao</i> , <i>Lang Qin*</i>
12:30-13:30	Lunch
Session A8: Connection Behaviour 3 (Main Hall) Chairmen: Prof. Toru Takeuchi and Prof. Lewei Tong	
13:30-13:45	Ultimate Strength Evaluation of Inclined Fillet Welds Based on Limit Analysis <i>Misaki Tanaka*</i> , <i>Hayato Asada</i> , <i>Tsuyoshi Tanaka</i>
13:45-14:00	Experimental Research of Screw And Riveted Connections in the Steel Thin-Walled Structures under Static and Cyclic Loading <i>Eduard Ayrumyan*</i> , <i>Ivan Katranov</i> , <i>Nikolay Kamenshchikov</i>
14:00-14:15	Behaviour of Joint Components of I Beam to Tubular Columns Connections with Welded Reverse Channel <i>Lu í Magalhães*</i> , <i>Carlos Rebelo</i> , <i>Sandra Jordão</i>
14:15-14:30	Investigation of Hollow Structural Section Based Collar Connections under Seismic Loads <i>Dan Wei*</i> , <i>Jason P. McCormick</i>
14:30-14:45	Numerical Investigation on the Seismic Response of Bolted Extended Stiffened End-Plate Joints <i>Roberto Tartaglia*</i> , <i>Mariana Zimbru</i> , <i>Mario D'Aniello</i> , <i>Silvia Costanzo</i> , <i>Raffaele Landolfo</i> , <i>Attilio De Martino</i>
14:45-15:00	Seismic Performance of Multistorey Frames with Bolted Extended End-Plate Joints: the Influence of Joint Modelling Assumptions <i>Silvia Costanzo*</i> , <i>Mariana Zimbru</i> , <i>Mario D'Aniello</i> , <i>Roberto Tartaglia</i> , <i>Raffaele Landolfo</i> , <i>Attilio De Martino</i>

15:00-15:15	Simplified Strut Modeling for Beam-to-Column Connection Retrofitted with Supplemental H-Section Haunches <i>Takuma Uehara*</i> , <i>Hayato Asada</i> , <i>Tsuyoshi Tnaka</i>
15:15-15:30	An Experimental Study of High-Strength Bolted T-Stub Connections to SHS Columns under Cyclic Loading <i>Zhi-Yu Wang*</i> , <i>Hui Xue</i> , <i>Xiao-Kai Liu</i> , <i>Bei-Lei Lv</i>
Session B8: Analytical and Experimental Methods 2 (Exhibition Hall) Chairmen: Prof. Tao Wang and Prof. Claudio Amadio	
13:30-13:45	An Approach for Evaluating the Damage-Control Behavior of Steel Frames with Buckling Restrained Braces Based on Energy Balance Concept <i>Ke Ke*</i> , <i>Xiu-Zhang He</i> , <i>Yi-Yi Chen</i>
13:45-14:00	Analysis of Hybrid Damping Device with Self-Centring <i>R. Kordani</i> , <i>G.W. Rodgers*</i> , <i>J.G. Chase</i>
14:00-14:15	Influence of Damping on The Prediction of Dynamic Response of Moment Frames by Nonlinear Static Methods <i>Francesca Barbagallo</i> , <i>Melina Bosco</i> , <i>Aurelio Ghersi</i> , <i>Edoardo M. Marino*</i>
14:15-14:30	Analytical Study on the Yield Strength of Roof Brace and the In-Plane Defromation of Steel-Gymnasium Roof <i>Yuka Matsumoto*</i> , <i>Marie Suzuki</i>
14:30-14:45	Calibration of Strength and Stiffness Deterioration Hysteretic Models Using Optimization Algorithms <i>Miguel Araújo*</i> , <i>Lu í Macedo</i> , <i>Jos é Miguel Castro</i>
14:45-15:00	Quasistatic Experimental Testing of Vulnerable Concentric Braced Frames <i>Barbara G. Simpson</i> , <i>Stephen A. Mahin*</i>
15:00-15:15	A Method to Avoid Weak Storey Mechanisms in Concentrically Braced Frames <i>Daniel B. Merczel*</i> , <i>Jean-Marie Aribert</i> , <i>Hugues Somja</i> , <i>Mohammed Hjiáj</i> , <i>János Lógó</i>
15:15-15:30	Modelling on Post-Local Buckling Degradation Behavior of Square Hollow Steel Section Beam-Columns <i>Yong-Tao Bai*</i> , <i>Masahiro Kurata</i> , <i>Masayoshi Nakashima</i>
15:30-15:50	Coffee Break
Session A9: Codification, Design, and Practice 2/ Seismic, Wind and Exceptional Loads (Main Hall) Chairmen: Prof. Hussam Mahmoud and Prof. Jean-Marie Aribert	
15:50-16:05	Development of Ry,Rt Factors and Probable Brace Resistance Axial Loads for the Seismic Design of Bracing Connections and Other Members <i>Steven Cerri</i> , <i>Harrison Moir</i> , <i>Dimitrios G. Lignos*</i>
16:05-16:20	Seismic Loss Estimation for Efficient Decision Making to Design Moment Resisting Frames: Eurocode 8 versus TPMC <i>A. Longo</i> , <i>V. Piluso*</i>
16:20-16:35	Seismic Design of CFT-MRF and BRBF Structural Systems for Steel Buildings in Ecuador <i>Pedro P. Rojas*</i> , <i>Mario E. Aguaguíña</i> , <i>Ricardo A. Herrera</i>

16:35-16:50	Buckling Restrained Brace Retrofit Technique for Existing Electric Power Transmission Towers <i>Marco Trovato, Li Sun*, Bozidar Stojadinovic</i>
16:50-17:05	Strength Amplification of Structural Steel under Dynamic Cyclic Loading Due to High Strain-Rate <i>Yuko Shimada*, Yu Jiao, Satoshi Yamada</i>
17:05-17:20	Influence of Earthquake Damage on Passive Fire Protection and Structural Fire Behaviour <i>Markus Knobloch, Mario Fontana*</i>
17:20-17:35	The Effect of Earthquake Characteristics on the Localized Behavior of Moment Connections under Fire <i>Hussam Mahmoud*, Mehrdad Memari, Collin Turbert</i>
17:35-17:50	The Behavior of Spherical Domes under Wind and Earthquake Action <i>Shuai Xu*, Zhihua Chen, Federico M. Mazzolani</i>
Session B9: Analytical and Experimental Methods 3 (Exhibition Hall) Chairmen: Prof. Sachi Furukawa and Dr. Gregory MacRae	
15:50-16:05	Effect of Strength and Stiffness of Single-Storey Steel Buildings on Content Sliding Response in Earthquakes <i>Trevor Z. Yeow*, Gregory A. MacRae, Rajesh R. Dhakal</i>
16:05-16:20	Earthquake Sequence Effects on Steel Buildings <i>Ali A. Rad*, Gregory A. MacRae, Trevor Z. Yeow, Desmond Bull</i>
16:20-16:35	Influence of Modelling of Steel Link Beams on the Seismic Response of Single-Storey EBFS <i>Melina Bosco, Aurelio Ghersi, Pier Paolo Rossi*, Paola Stramondo</i>
16:35-16:50	Derivation of Ductility-Equivalent Viscous Damping Relationships for Steel Moment-Resisting Frames with Partial Strength Joints <i>Hugo Augusto, Jos é Miguel Castro*, Carlos Rebelo, Lu í Sim ões da Silva</i>
16:50-17:05	Deformation and Strain Histories in Shell-to-Base Joints of Unanchored Steel Storage-Tanks During Seismic Loading <i>Clemens Tappauf*, Andreas Tara</i>
17:05-17:20	Comparison of Modelling Strategies for Steel Structures under Cyclic Loads <i>Lu í Macedo*, Miguel Araújo, Jos é Miguel Castro</i>
17:20-17:35	Seismic Response of EBFs: Split K-Scheme vs Inverted Y-Scheme <i>Rosario Montuori, Elide Nastri*, Vincenzo Piluso</i>
17:35-17:50	Out-of-plane Seismic Design by Testing of Knauf Drywall Partitions <i>Luigi Fiorino*, Dominik Herfurth, Hans U. Hummel, Ornella Iuorio, Raffaele Landolfo, Vincenzo Macillo, Tatiana Pali, Maria Teresa Terracciano</i>
17:50-18:10	Closing Ceremony (Main Hall)

Poster Sessions of STESSA 2015

Location: Hallway between Main Hall and Exhibition Hall

Section 1: Performance-Based Design of Structures		
July 1, 2015	10:00-10:20; 15:30-15:50	Performance Based Design of MR-Frames by TPMC and Energy Approach <i>E. Nastri, V. Piluso</i>
		Seismic Behavior of Concentric Braced Frames Designed Using Direct Displacement-Based Design Method <i>Dipti Ranjan Sahoo, Ankit Prakash</i>
Section 2: Member Behaviour		
July 1, 2015	10:00-10:20; 15:30-15:50	Different Bracing Types in Seismic Resistant Structures <i>Marina Stoian, Helmuth Köber</i>
		Steel Sliding-Controlled Coupled Beam Modules for Improving Seismic Resilience of Building Systems <i>Ying-Cheng Lin</i>
		SHS Stub Columns under Cyclic Large Strain Loading: an Experimental and Numerical Study <i>Liang-Jiu Jia, Tsuyoshi Koyama, Hitoshi Kuwamura</i>
Section 3: Connection Behaviour		
July 1, 2015	10:00-10:20; 15:30-15:50	Lateral Stiffness and Strength of Steel Column-to-Footing Connections <i>Paul W. Richards, Nicholas Barnwell</i>
		Numerical Simulation of Q690 Grade Steel Extended End Plate Connections <i>Feifei Sun, Mingming Ran, Mi Sun</i>
		Study on Performance of Flange Cover Plate in Web-Clamped Beam-to-Column Connection <i>Tong Su, Keita Araki, Jun Iyama</i>
		Velocity Effects on The Behaviour of Asymmetrical Friction Connections (AFC) <i>Jose C. Chanchi Golondrino, Gregory A. MacRae, James G. Chase, Geoffrey W. Rodgers, George C. Clifton</i>
		Finite Element Analysis of Steel Frame Beam-Column Joints Under Low-Cyclic Loading Based on OpenSEES <i>Weining Sui, Qingze Shi</i>
		Seismic Behavior on Joint of PEC Columns-Steel Beam Connection with End-Plate <i>Gentian Zhao, Di Hao</i>
		Experimental Tests of Compound Battened Column and Its Base-Plate Connection Subject to Axial and Horizontal Forces

		<i>Gaetano Della Corte, Raffaele Landolfo</i>
Section 4: Global Behaviour		
July 2, 2015	9:30-9:50; 15:30-15:50	Modeling Aspects for Collapse Analysis of Steel Moment-Frame Buildings <i>Johnn Judd, Andrew B. Hardyniec, Finley Charney</i>
		Numerical Simulation of Pallet Rack Systems Failure under Seismic Actions <i>Andrei Crisan, Dan Dubina, Ioan Marginean</i>
		Seismic Performance and Re-Centring Capability of Dual Eccentrically Braced Frames with Replaceable Links <i>Adriana Ioan, Aurel Stratan, Dan Dubina, Mario D'Aniello, Raffaele Landolfo</i>
		Effects of Slab-Beam Interaction on the Seismic Behaviour of Dual Eccentrically Braced Steel Frames <i>Horatiu-Alin Mociran, Stefan Marius Buru</i>
		Preliminary Analysis and Design of an Experimental Facility for the Pseudodynamic Earthquake Test of a Real Scale Steel Moment Resisting Frame with Partial Strength Joint <i>Antonella B. Francavilla, Massimo Latour, Vincenzo Piluso, Gianvittorio Rizzano</i>
Assessment of Adaptive Pushover Procedures for Earthquake-Resistant Steel Moment Frames <i>M. Ferraioli, A. M. Avossa, A. Lavino, A. Mandara</i>		
Section 5: Analytical and Experimental Methods		
July 2, 2015	9:30-9:50; 15:30-15:50	An Advanced Hybrid Simulation Model Based on Phenomenological and Artificial Intelligence Approaches to Predict The Response of Structures under Seismic Loads <i>Syed Murtuza Abbas , Gian Andrea Rassati</i>
		Evaluation of Two Scaling Methods in Association with a New and Practical Record Selection Procedure <i>Leila Haj Najafi, Mohsen Tehranizadeh</i>
		Behaviour of Eccentrically Braced Structures with Vertical Truss Elements <i>Helmuth Köber</i>
		Influence of Gravity Load Resisting System on the Application of Theory of Plastic Mechanism Control for Moment Resisting Frames <i>A. Longo, R. Montuori, V. Piluso</i>
		Seismic Response Analysis under Traveling Wave Effect of an Arch Truss Across Abandoned Mine Pit <i>Jian Zhou, Dong-Ya An, Yao-Kang Zhang, Jia-Chun Cui</i>
		The ELISSA Project: Planning of a Research on the Seismic Performance Evaluation of Cold-formed Steel Modular Systems <i>Luigi Fiorino, Ornella Iuorio, Vincenzo Macillo, Maria Teresa</i>

		<i>Terracciano, Tatiana Pali, Bianca Bucciero, Raffaele Landolfo</i>
		Non-linear Seismic Analysis and Behaviour of CBF-V <i>Beatrice Faggiano, Antonio Formisano, Carmine Castaldo, Luigi Fiorino, Vincenzo Macillo, Federico M. Mazzolani</i>
Section 6: Passive, Semi-active and Active Control		
July 2, 2015	9:30-9:50; 15:30-15:50	Evaluation of Dissipative Effectiveness of a Hybrid System Composed by a Buckling Restrained Brace with a Magneto Rheological Damper <i>Norin Phillip-Vacarescu, Aurel Stratan, Dan Dubina</i>
		Energy Balance-Based Method for Response Control Structures with Hysteretic Dampers and Viscous Dampers <i>Toshiaki Sato, Haruyuki Kitamura, Daiki Sato, Daisuke Sato, Michio Yamaguchi, Naoya Wakita, Yuta Watanuki</i>
		The Life Cycle Cost Assessment of Super Tall Buildings with Viscous Damping Walls <i>Xi Zhan, Xin Zhao, Yimin Zheng</i>
Section 7: Codification, Design, and Practice		
July 3, 2015	9:30-9:50; 15:30-15:50	Some Thoughts for the Prediction of The Local Inelastic Capacity of MRF Subjected to Seismic Actions <i>Anthimos Anastasiadis, Marius Mosoarca, Cristian Petrus, Federico M. Mazzolani</i>
		Design of Connections for Composite Special Moment Frames (C-SMF) with Concrete-Filled Steel Tube (CFT) Columns <i>Erica C. Fischer, Zhichao Lai, Amit H. Varma</i>
		Cost Comparison of MRF, CBF And EBF Mid-Height Steel Buildings in Bogotá <i>Miguel Ángel Montaña, Francisco López-Almansa</i>
		An Approach for Seismic Design of Buildings Structured with Eccentrically Braced Frames in Mexico <i>Alonso Gómez-Bernal, Antonio Gascón-Ramírez, Luis Aguilar-Ugarte, Hugón Juárez-García</i>
		Seismic Behavior of Two Steel Solutions for Apartment Extensions in the Case of Large Prefabricated Reinforced Concrete Collective Dwellings <i>Miodrag Popov, Daniel Grecea, Adrian Dogariu, Viorel Ungureanu</i>
Performance Assessment of X-CBF Designed according to an Improved (EC8-based) Approach <i>Melina Bosco, Giuseppe Brandonisio, Edoardo M. Marino, Elena Mele</i>		
Section 8: Seismic, Wind and Exceptional Loads		
July 3, 2015	9:30-9:50; 15:30-15:50	Design Constraints for the Optimal Structural Design of Super Tall Buildings under Earthquake and Wind <i>Xin Zhao, Xiang Jiang, Yaomin Dong</i>

	<p>Combined Tuned Damper Based Wind and Earthquake Vibration Control for Super Tall Buildings <i>Lilin Wang, Yimin Zheng, Xin Zhao</i></p>
	<p>Experimental Study of High-Performance Structural Steel Q345GJ under Cyclic Loading <i>Gang Xiong, Bo Yang, Le Shen, Ying Hu, Shidong Nie, Guoxing Dai</i></p>

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