Tuesday, July 26, 2016	
14:00 – 18:00	Registration (Lobby of the Main Auditorium)
19:00	Welcome Reception

Wednesday Morning (WeM), July 27, 2016	
8:00 – 19:00	Registration (Lobby of the Main Auditorium)
9:00 - 9:30	Opening Ceremony (Main Auditorium)
9:30 – 10:15	Keynote Lecture (Main Auditorium) Chairman: To be announced
	Terri Boake "Innovation in Architectural Steel"
10:15 - 10:45	Coffee Break (Lobby of the Main Auditorium)
10:45 – 12:45	Concurrent Technical Sessions: WeM 1 to WeM 4

WeM 1 – Main Auditorium	WeM 2 – Room B1.14	WeM 3 – Room B1.15	WeM 4 – Room B1.16
General Session	Special Session	General Session	General Session
Building Envelopes (1)	Performance Aided Assisted Design	Glass Structures	Timber structures
Chairman: To be announced	Chairman: Dario Parigi	Chairman: To be announced	Chairman: To be announced
New equipment for new technology: Fixing systems for thin, textile reinforced concrete façades	Building timber gridshells with air: Numerical simulations and technique challenges	The behaviour of fire resistant glass under fire	Contrasting approaches to load-bearing timber structures
M. Roik	A. Liuti, A. Pugnale & B. D'Amico	K. Machalická, M. Charvátová, M. Eliášová & P. Kuklík	A. Gianoli & R. Furrer
Mashrabiya reinvented: Double façades, persian gulf style	Specialised algorithms for different project stages in a post-formed timber gridshell design	Durability of linear adhesive cold-formed steel- glass connections	Mass timber high-rise design, cost and schedule research: Competitive advantages of wood over concrete
T. Boake	S. Pone, G. Mirra, E. Pignatelli, D. Lancia & S. Colabella	B. Van Lancker, W. De Corte & J. Belis	A. Jacobs, M. Timmers, J. Sundnes & A. Baker
Reconstruction of roof decks of large roofs as a result of a synergy between technical and architectural solutions	Computation tools for the design of a deployable dome structure	System safety of statically indeterminate glass beams after failure	Structural performance of multi-story cross- laminated timber (CLT) buildings
V.Tichomirov, K. Landl & D. Bečkovský	D. Lee, O. Larsen & S. Kim	K. Martens, R. Caspeele & J. Belis	I. Lukacs & A. Björnfot
Façade modernisation for retrofitting existing buildings to achieve nearly- zero energy buildings	Transformable bending-active structures: Manipulating elastic deformation in kinetic and rapidly assembled structures	Developing the bundled glass column	The conceptual design of hybrid structures - Theoretical and experimental research of external prestressed timber beams
S. Zuhaib, M. Hajdukiewicz, M. Keane & J. Goggins	S. Brancart, L. De Laet & N. De Temmerman	F. Oikonomopoulou, F. Veer, T. Bristogianni & R. Nijsse	S. Miljanovic & M. Zlatar
Structural laminated bamboo passive house	Generative material simulation: Contemporary trends in parametric structural design	A scientifically valid approach for determining the design strength and safety factor for heat strengthened glass	Hybrid wood-based structural systems for multi-storey buildings
M. Taylor	J. Ripple	F. Veer	C. Loss, M. Piazza & R. Zandonini
Application of simple surface climate models for modelling mould growth on wooden façades	Advances in design and fabrication of free-form reciprocal structures	Lateral and torsional stability of hybrid steel- glass beams	
T. Thiis, I. Burud, D. Kraniotis & L. Gobakken	D. Parigi	I. Pravdová & M. Eliášová	

Wednesday Afternoon (WeA), July 27, 2016		
12:45 – 14:00	Lunch (Restaurant of the University)	
14:00 – 16:00	Concurrent Technical Sessions: WeA 1 to WeA 4	

WeA 1 – Main Auditorium	WeA 2 – Room B1.14	WeA 3 – Room B1.15	WeA 4 – Room B1.16
General Session	Special Session	Special Session	General Session
Building Envelopes (2)	The authority of the structure	On the tectonics in architecture	Educating architects and structural engineers (1)
Chairman: to be announced	Chairman: Mario Rinke	Chairman: Patricia Trovalusci	Chairman: To be announced
An oak composite thermal dynamic envelope	The art of structure	Heinz Hossdorf: The innovation of "mixed rims" in the thin concrete shells of modern architectura	A comparative study of the physical model as a tool for structural education
I. Foged & A. Pasold	J. Schwartz	P. Cassinello	L. Luyten, T. Vilquin, I. Vrouwe & E. Verstrynge
External musculature: The façade in the works of Ignacio Álvarez Castelao	National technical library Prague - Building as a technical textbook	The "question of the technique": From the designing idea to the realized form	Blending structural application into architectural design studios
P. Cueto	O. Hofmeister	R. Panei, P. Trovalusci & A. Tinelli	M. Callahan, S. Shadravan & C. Leinneweber
Understanding the complexities of building physics and human behaviour in achieving a nearly zero energy building	How to re-open the black box in the structural design of complex geometries	Structural design and aesthetics of infrastructures in natural and artificial environments	Effective assignments and haptic teaching methods in architectural structure
P. Moran, M. Hajdukiewicz & J. Goggins	K. Verbeeck, L. Loos, L. De Laet & L. Muller	M. Pasca	R. Schwaen & R. Arlt
	Trended structures – On the authority of the load-bearing structure	Foldable geometries for architectural applications: Tectonics and material expression	Architect in residence: Pursuing integrated design within engineering
Bionic patterns in architectural structures	N. Graber & C. Steiger	K. Liapi, A. Ioannidi & E. Spyridonos	T. Nees
N. Nawari & T. Chichugova	Homage - Source of inspiration	Revisiting the form finding techniques of Sergio	A structuralist view of prefabrication
		Musmeci: The bridge over the Basento river	
M. Molina-Huelva, A. Barrios-Padura & P. Fernández-Ans	M. Schlaich	P. Magrone, G. Tomasello, S. Adriaenssens, S. Gabriele & V. Varano	A. Correia, L. Simões da Silva & V. Murtinho
		A two-stage approach for the design of grid shells	
		E. Grande, M. Imbimbo & V. Tomei	
		Three-dimensional lower-bound analysis of masonry structures	
		P. Foti, A. Fraddosio, N. Lepore & M. Piccioni	

Wednesday Evening (WeE), July 27, 2016		
16:00 – 16:30	Coffee Break (Lobby of the Main Auditorium)	
16:30 – 18:30	Concurrent Technical Sessions: WeE 1 to WeE 4	

WeE 1 – Main Auditorium	WeE 2 – Room B1.14	WeE 3 – Room B1.15	WeE 4 – Room B1.16
General Session	<u>Mini-symposium</u>	Special Session	General Session
Innovative architectural and structural design (1)	New wood and bio-based construction (1)	Teaching Architecture in full scale - wood	Educating architects and structural engineers (2)
Chairman: To be announced	Chairman: Ian Smith and Andreas Falk	Chairman: Jan Siem	Chairman: To be announced
Optimization methodology for cross-section size in moment-resisting frame design	Opening of the session, introduction to the theme	Models in 1:1 – A powerful education and research tool for bridging the gap between architects and engineers	Advanced structural understanding: Load path and structural function revised
J. Xu, X. Lu & B. Spencer	Ian Smith & Andreas Falk	O. Popovic-Larsen	L. Luyten
Pedestrian bridge as public art: Detailing in exposed steel	Overview on the structural performance of timber structures under the effects of blast loading – Research and design considerations	From best practices to tactical design	Bridge Design; Education and research in the field of integral, innovative, sustainable bridge design at TU Delft
T. Boake	D. Lacroix, C. Viau, D. Côté, M. Poulin, A. Lopez & G. Doudak	P. Tidwell	J. Smits
Integrated complex shell structures made up of effectively transformed flat folded sheets	Wall elements made of timber and wood- cement compounds – Building-physical properties and structural performance	Phases of intensive design and build workshops in architectural education	Behavior of building structures: Study through models of relevant architecture
J. Abramczyk	D. Zwicky & N. Macchi	P. Aalto & S. Rintala	E. Fenollosa, I. Cabrera, A. Almerich & V. LLopis
Bending-active structures: A parametric analysis on decoding structural behavior and capacity	Slab elements made of timber and wood- cement compounds – Structural and other performances	Learn-by-making and its role in architectural education – Examples from Sweden and Australia	In search of the lunar catenary: Teaching form- active design with lower mathematics
K. Alexandrou & M. Phocas	M. Eymard & D. Zwicky	D. Bylund	E. Jannasch
Innovative structural system consisting of CFT columns and precast concrete beams	Function and design of innovative bio-based products for the building sector	Full scale in four months – Objectives, methods and results	Drawing in the engineering design process: Learning from the first 150 years of modern engineering
A. El Debs, L. Bezerra & M. El Debs	A. Falk & M. Wålinder	J. Siem, B. Braaten & A. Gilberg	E. Brito, R. Póvoas & P. Providência
			Structural engineering in architectural studies at CTU Prague
			M. Vavruskova & M. Pospisil

Thursday Morning (ThM), July 28, 2016		
8:30 – 19:00	Registration (Lobby of the Main Auditorium)	
9:00 – 10:30	Keynote Lectures (Main Auditorium) Chairman: To be announced James O'Callaghan " Glass Challenges – Past, Present, and Future " Enzo Siviero "Bridges and viaducts between Engineering and Architecture"	
10:30 – 11:00	Coffee Break (Lobby of the Main Auditorium)	
11:00 – 13:15	Concurrent Technical Sessions: ThM 1 to ThM 4	

ThM 1 – Main Auditorium	ThM 2 – Room B1.14	ThM 3 – Room B1.15	ThM 4 – Room B1.16
General Session	Mini-symposium	Special Session	General Session
Innovative architectural and structural design (2)	New wood and bio-based construction (2)	Teaching Architecture in full scale - regional materials	Educating architects and structural engineers (3)
Chairman: To be announced	Chairman: Ian Smith and Andreas Falk	Chairman: Finn Hakonsen	Chairman: To be announced
Is there a future for fabric-formed concrete structures?	Beech LVL – High strength material for engineered timber structures	Material, structure, tectonics: The power of full scale in the education of architects	The relationship between structure, architecture, and cost of building based on conceptual design of cable-stayed footbridge
R. Schmitz	H. Blass, M. Enders-Comberg & M. Frese	U. Meister & C. Rist-Stadelmann	S. Skibicki
Sarajevo University library architectural and structural concept	Experimental campaign of mechanical CLT connections subjected to a combination of shear and tension forces	Constructing things for constructing other things	The teaching of structural engineering – A practical approach
A.Pašić, M. Hrasnica & F. Biberkić	L. Pozza, M. Massari, M. Savoia & B. Ferracuti	T. Berlemont	L. Houck & T. Aurlien
Early-stage integration of architectural and structural performance in a parametric multi- objective design tool	Experimental analysis of a new connection system for CLT structures	An inclusive aesthetic approach to full scale building	Design and build studios in architectural education
N. Brown, J. Ochsendorf, C. Mueller & J. de Oliveira	A. Polastri, R. Brandner & D. Casagrande	N. Haarsaker & G. Brenk	S. Sandness
The New MAAT in Lisbon. Using old methods to design contemporary architectural solutions	Numerical analyses of high - and medium - Rise CLT buildings braced with cores and additional shear walls	Learning at the scale of "real life". New pedagogical ideas for teaching architecture	Inverse investigations: Material definitions of structure and space
E. Brito & R. Furtado	A. Polastri, L. Pozza, C. Loss & I. Smith	M. Spaan	M. Donofrio
Structural system concept for twisted buildings		Building culture written into the landscape – How to read spatial tradition	STEM principles implementation in building technology education at Texas universities
M. Piekarski		J. Borucka	S. Toker-Beeson & R. Azari
Integrating engineering and architecture		Listening to the material. An intuitive approach to the knowledge of construction materials	Crossing boundaries: Blurring the lines between engineers and architects
S. Smith		R. Farré	K. Dong & T. Fowler
		Didactic concepts within teaching architecture in one to one scale – Two cases	
		F. Hakonsen, M. Waagaard , A. Gilberg & J. Siem	

Thursday Afternoon (ThA), July 28, 2016		
13:00 – 14:00	Lunch (Restaurant of the University)	
14:00 – 16:10	Concurrent Technical Sessions: ThA 1 to ThA 4	

ThA 1 – Main Auditorium	ThA 2 – Room B1.14	ThA 3 – Room B1.15	ThA 4 – Room B1.16
General Session	Mini-symposium	Special Session	General Session
Innovative architectural and structural design (3)	New wood and bio-based construction (3)	Beyond Disciplines: Building Transdisciplinary Teams	Educating architects and structural engineers (4)
Chairman: To be announced	Chairman: Ian Smith and Andreas Falk	Chairman: James Doerfler	Chairman: To be announced
An eco-friendly approach for enhancing rural archaeological heritage in Romania	Bio-based structural building components grown into near net shape	Shared parameters: Interfaces of collaborative exchange	Tectonics in the study abroad design studio
S. Bica, M. Tămăşan & C. Mărăcineanu	F. Moser, M. Trautz, A.L. Beger, M. Löwer, J. Feldhusen, J. Prell, J. Reimer, A. Wormit, B. Usadel, C. Kämpfer, T.B. Seiler & H. Hollert	J. Ripple	S. Milovanovic-Bertram
Externally post-tensioned structures: Validation through physical models	Pourable wood-cement compounds – Properties, potential and challenges of a new structural material	AECO: Web based collaborative digital design	A survey of structures education in North American schools of architecture
L. Todisco & C. Mueller	N. Macchi & D. Zwicky	M. Naugle	R. Dermody, D. Oakley & M. Uihlein
Topology optimization of photovoltaic panels as a factor in shaping structural system and architectural form	Can CLT construction help copenhagen become world's first carbon neutral city?	Blurring boundaries through interdisciplinary engagement	Forces frozen: Hands-on exploration of structural ice shells
R. Tarczewski & M. Święciak	D. Horsewill & T. Nielsen	M. Mistur	C. Fivet & C. Mueller
'COCOON' a bamboo building with integration of digital design and low-tech construction	Energy and seismic performance of timber buildings in Mediterranean region	Interdisciplinary synergy	Sketching as thinking: Structural concepts and design
L. Hansen & S. Kim	A. Polastri, G. H. Poh'siè, I. Paradisi & J.	R. Roesling & B. Nuttall	M. Dunn
	Ratajczak		
Studies in 3D Topologies: Structural morphologies and grid shell structures	A new dissipative connection for CLT buildings		A freehand method for analyzing certain spatial porticoes almost accurately
I. Lochner	L. Marchi, D. Trutalli, R. Scotta, L. Pozza & A. Ceccotti		A. Lacort

Thursday Evening (ThE), July 28, 2016		
16:10 – 16:40	Coffee Break (Lobby of the Main Auditorium)	
16:40 – 19:00	Concurrent Technical Sessions: ThE 1 to ThE 4	

ThE 1 – Main Auditorium	ThE 2 – Room B1.14	ThE 3 – Room B1.15	ThE 4 – Room B1.16
General Session Tall Buildings and structural design challenges	General Session The history of the relationship between architects and structural engineers	<u>Special Session</u> Reinforced Ice Structures: in the footsteps of Da Vinci and Candela	General Session Concrete and masonry structures
Chairman: To be announced	Chairman: To be announced	Chairman: Jan Belis	Chairman: To be announced
Wind tunnel tests around bluff-bodies of circular base to optimize space grid envelope structures for high-rise steel buildings	A study on the conservation of operating historical bridges - Recent experiences in Japan	Historical development of structural ice	Influence of the wall shape on the collapse of arch-wall systems
R. Señís	H. Isohata	A. Pronk, N. Vasiliev, J. Belis	D. Aita, R. Barsotti & S. Bennati
Façade integrated structural damping systems for tall buildings	Technological changes and architecture: The case of APCER magazine, Portugal 1935-45	Compressive strength of ice and cellulose-ice composite	The structure of the external lift at the Port of Ribadeo. Galicia. Spain
K. Moon	J. Delgado & P. Pinto	P.J.S. Cruz & J. Belis	J. Valcárcel
An engineer reads. Interpreting the Citylife Tower RdD1 structural design process through an essay of Italo Calvino	Claiming ground: The first structural engineering license in the United States	Technical installations to enable the construction of the "Juuka in ice" project 2016	Form and structure in the Cathedral of Cuzco
E. Brito & R. Furtado	M. Uihlein	J. van den Elzen	H. Rodríguez-Camilloni
Comparative evaluation of diagrid and braced tube structures for tall buildings	Structural documentation of the Palace of Congress in Brasília	Design of Da Vinci's bridge in ice	Assessment of masonry buildings subjected to landslide by strut-and-tie models
K. Moon	J. Sánchez & E. da Silva	A. Pronk, R. Blok, M. Van Brunschot, A. Van Lier, F. Van de Mortel, K. Williams, et all	F. Palmisano & A. Elia
Bearing structure of a multi layered stone façade in cantilever of a 5 story residence in Athens	Building modelling in historical perspective	Reinforced ice structures: In the footsteps of Candela	Beyond the funicular: Exploiting untapped potentials in masonry construction
M. Kyriazis	R. Tarczewski	J. Belis, B. Ronsse, K. Martens, B. Van Lancker, P.J.S. Cruz & G. Deruyter	E. Jannasch
A yoga analogy in structural behaviour: Understanding versus computation	Collaboration between architects and structural engineers: A history of major successes and major failures	On-site geometrical measurements of an experimental ice composite shell through TLS and photogrammetry	Graphical methods for the design of masonry arches: The case of Luis Moya Blanco's Nuestra Señora de la Araucana in Madrid, 1972
J. Bernabeu & A. Bernabeu	J. Rey-Rey	G. Deruyter, K. Fransen, H. Glas & J. Belis	L. Todisco, C. Fivet & S. Rojo
Micro-mega - Nature inspired structural patterns for tall buildings: Modeling, analysis, design			
G. Montuori, G. Perrella, M. Fraldi & E. Mele			

	Friday Morning (FrM), July 29, 2016
9:00 – 19:00	Registration (Lobby of the Main Auditorium)
9:30 – 10:15	Keynote Lectures (Main Auditorium) Chairman: To be announced
	Frederic Veer "Materials science, bridging the gap between architecture, architectural engineering and structural engineering"
10:15 – 10:45	Coffee Break (Lobby of the Main Auditorium)
10:45 – 12:30	Concurrent Technical Sessions: FrM 1 to FrM 4

FrM 1 – Main Auditorium	FrM 2 – Room B1.14	FrM 3 – Room B1.15	FrM 4 – Room B1.16
General Session	<u>Mini-symposium</u>	General Session	General Session
The borderline between architecture and structural engineering (1)	Everyday Tectonics (1)	The tectonic of architectural solutions (1)	Steel, Concrete and masonry structures
Chairman: To be announced	Chairman: Anne Beim	Chairman: To be announced	Chairman: To be announced
When structure and architecture are interdependent	Everyday tectonics? – Clarification of concepts	Carlo Scarpa and the search for gravity	New roles of the structure in the refurbishment of the architectural heritage: The MediaLab-Prado project
M. Sanvitto	A. Beim & M. Hvejsel	A. Schultz	J. Rey & P. Vegas
New orders, in search of a new point-block diagram for Hong Kong	A didactic of tectonics	Tectonic thinking on housing of modern architecture: Mies van der Rohe vs Alison and Peter Smithson	Prefabricated planar elements for reinforced brick shells
O. Ottevaere	N. Cowee	A. Rodrigues & P. Baía	A. Pick, S. Schäfer & J. Reising
Structure as power: The case of the Matosinhos Market, Portugal, 1936-1953	Constructing and construing environmental sensations	Re-Envisioning the Knot: The Neil Astle House	Safety assessment of masonry structures based on modern methods and technologies
J. Delgado & P. Pinto	I. Foged	B. Wrightsman	C.S. Dragomir, M. C. Calin, S. Purdoiu, A. Virsta & R. Manea
Architectural vs. structural constraints in urban multi-hazard safety assessment	Auxiliary architectures – The everyday potential of supplementary textile architectures	From Seia to Guimarães. Fernando Távora's tectonic shift in the Sacor fuel stations	In the Arabian Gulf mantenance is the key to sustainability
E. Georgescu, C. Gociman, I. Craifaleanu, T. Florescu, M. Georgescu & C. Moscu	M. Hensel & D. Hensel	E. Fernandes	M. Samarai
Railway stations – The borderline between architecture and structure	Subtle or Significant. Tectonic Transformations of Everyday Architecture	Tectonics and landscape: The structure of ground and atmosphere	Sustainable construction yhrough Eco-efficient ultra-high performance concrete
E. Kido	C. Bundgaard	M. Laboy	I. Ferdosian & A. Camões

	Friday Afternoon (FrA), July 29, 2016
12:30 – 14:00	Lunch (Restaurant of the University)
14:00 – 15:20	Concurrent Technical Sessions: FrA 1 to FrA 4

FrA 1 – Main Auditorium	FrA 2 – Room B1.14	FrA 3 – Room B1.15	FrA 4 – Room B1.16
<u>General Session</u> The borderline between architecture and structural engineering (2)	<u>Mini-symposium</u> Everyday Tectonics (2)	General Session The tectonic of architectural solutions (2)	General Session Lightweight and membrane structures
Chairman: Jan Belis	Chairman: Marie Frier Hvejsel	Chairman: To be announced	Chairman: To be announced
The physical model in the structural studies of Robert Le Ricolais: "apparatus" or "hierogram"	The tectonics of recycling	Tectonic approaches in the design of concrete architecture in postwar Italy	A simplified and robust material model for fabrics used in membrane structures
M. Vrontissi	U. Madsen	L. Ingold & M. Rinke	J. Pargana & V. Leitão
Holistic integration versus separation and fragmentation in the architecture	Investigations on cultural ecology of industrial timber construction – Through tectonic understanding of new wood materials	Appropriate building physics in relation to the tectonic of architectural quality	The new Warner Stand at Lord's Cricket Ground: Innovative fabric roof structures
D. Bijedic, R. Cahtarevic & S. Halilovic	K. Sundahl	C. Kristensen	S. Smith, A. Lerpiniere, W .Whitby, M. Trousdell & R. Zara
Formal and structural multiplicity in early truss design	Tensegrity systems - Transferring tectonics from the extraordinary to the everyday	Recovering a broader understanding of tectonics. The case for the architectural potentials of sheet metal	Lightweight modular membrane structures for various applications
M. Rinke	M. Hensel, G. Bover, J. Hoen, S. da Cunha & S. Sørensen	J. Holst & O. Jackson	S. Gellin & R. Tarczewski
New formal expectations. The dynamic alternative between the evident and the disturbing	The ecology of urban tectonics – Studied in everyday building culture of Hans Christian Hansen	Le Corbusier's Maison Dom-ino and John Habraken's supports: Differences and similarities	A case study for the use of structural textile cables in building
F. Suárez	A. Beim & M. Hvejsel	H. Ferreira, L. Simões da Silva & V. Murtinho	M. Brocato & R. Zarcone

Friday Evening (FrE), July 29, 2016

7:00 Concurrent Technical Sessions: FrE 1 to FrE 2

FrE 1 – Main Auditorium	FrE 2 – Room B1.14
General Session	General Session
Futuristic and emerging technologies	Computer and experimental methods
Chairman: To be announced	Chairman: To be announced
Rotoreliefs, definitively unfinished: From constructivism experiences to his legacy in progress, 1915-1998	Designing a slender footbridge based on a passive control algorithm
C. García	J.F. Jiménez-Alonso, A.M. Hernández Diaz& A. Sáez
Sun, sea, sand and architectural structures	Free form surfaces construction with precast pieces and minimum formwork
R. Rahman & M. Daud	P. Vegas & A. Bernabéu
Systematic case study on energy efficiency of existing Irish buildings using BIM in order to achieve nearly zero energy standards	Genetically enhanced parametric design in the exploration of architectural solutions
T. Ganguly, M. Hajdukiewicz, M. Keane & J. Goggins	P. von Buelow
Lightweight steel intensive solutions for over- roofing of existing residential buildings	Dynamic analysis of a modern cable-stayed footbridge
V. Ungureanu, A. Floricel & & M. Georgescu	J. Dulinska & I. Murzyn
	Optimization of stadium roof structure using force density method
	M. Uroš, P. Gidak & D. Lazarevic

17:00 – 17:30 Closing Ceremony (Main Auditorium)	
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15:20 – 17:00