IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

*This program may change

MONDAY, 27 OCTOBER 2025

ACTIVITIES		HOUR	PLACE	
REGISTRATION & COFFEE		8:00- 9:00	LOBBY	
WELCOME & OPENING CEREMONY IASS HONORS AND AWARDS: Honorary Member Award, Heinz Isler Prize, Tusoboi Prize, Hangai Prize TAC Technical Activities Report		9:00-10:25	ROOM A	MONDAY 27
HANGAI PRIZES Presentations:				
Takara Muto	Toward Extremely Lightweight Prestressed Structure	10:25-10:45		
PLATINUM SPONSOR		10:45-11:00		
COFFEE BREAK		11:00-11:30	LOBBY	
PLENARY SESSION KEYNOTE SPEAKERS				
PEPA CASSINELLO:	Eduardo Torroja. The man and his legacy	11:30- 12:15		
BENJAMÍN ROMANO:	Architect-Led Structural design	12:15-13:00		
LUNCH		13:00-14:00		

PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOMS	
SLOT 1	SESSION 1	(WG 13) Computational Methods	COORDINATION: Naoki Solano			14:00 - 15:30	ROOM A	MONDAY 27
			396	Yang Wen, Lai Chenggang, Lan Tianqing, Long Weiguo, Chen Zhiyu and Chen Di	Energy Dissipation Analysis of Steel Moment Frame of Sanxingdui Museum with Buckling Restrained Braces andViscous Dampers			
			490	Qin Yang, Hui Lu, Qilin Zhang and Zhiguo Chang	Flexural Performance of a New Prefabricated Composite External Wallboard			
			502	Hanbing Zhao and Shuaizhong Wang	A Computational Framework Designed for the Reuse of Concrete Framing			
			528	Sophie Moore and Stephen Prendergast	A Graph-Enabled Geometric Approach For Determining Tributary Load Diagrams For Floor Framing Systems			
SLOT 1	SESSION 2	(WG 12) Timber and Bio-based Spatial Structures	COORDINATION: Alfonso Rivas Cruces			14:00 - 15:30	ROOM B	MONDAY 27
			388	Koichiro Ishikawa and Khanh Nguyen	Analysis, design and realization of bamboo reciprocal spatial frames with joinery by PVC pipe and straw rope			
			425	Mario Uroš, Marta Šavor Novak, Marija Demšić, Petra Gidak and Josip Atalić	Stability analysis of a wooden single-layer reticulated cylindrical shell			
			435	Gabriel Lopez Rodriguez and Carlos Llopis Camps	Preliminary design of the pergolas structure for the architectural project of the multimodal transfer center of La Sagrera in Barcelona			
			444	Nanami Iribe, Yuya Yokoyama, Hiroki Awaji, Kazunori Nakayama and Takuo Nagai	Research on Joint Design and Structural and Geometrical Characteristics of Bamboo Lattice Shell Structures with Glass as Surface Material			
SLOT 1	SESSION 3	Metal Spatial Structures	COORDINATION: Isaura González Gottdiener			14:00 - 15:30	ROOM C	MONDAY 27
			395	Xianjun Duan, Jiaqi Ge, Yuebin Huang, Guojun Zhang, Shuguang Wang, Weizhen Huang and Yanxia Zhang	Experimental and numerical study on gusset plate connections in modular steel truss			
			399	Yuki Terazawa, Ryota Kaneko, Atsuya Niimi and Toru Takeuchi	Form-Finding of Metal Gridshells Focusing on The Tradeoff Relationship Between Total Strain Energy for Dead Load and Seismic Load			
			446	Jinchao Gu, Xiongyan Li, Wei Wang, Caibao Liu and Suduo Xue	Compressive Bearing Capacity of Welded Hollow Spherical Joints Reinforced Collaboratively by Rib-Ring Sleeve and Elastic Device			
SLOT 1	SESSION 4	Ai _informed Structural Engineering and design	COORDINATION: Mark Tam, Rob Otani, Lazlo Bleker			14:00 - 15:30	ROOM D	MONDAY 27
			400	Kazuki Hayashi and Makoto Ohsaki	Geometry-aware reinforcement learning for assembly sequence optimization of shells composed of triangular panels			
			494	Gabrielle Brooking and Luis Borunda	Deploying cGANs for Stress-Informed Adaptation and Material Redistribution in Hybrid Shell Structures			
			551	Xinlong Yang, Zongshuai Wan, Lazlo Bleker, Pierluigi D'Acunto and Kam-Ming Mark Tam	Integrating Force Density Method and Finite Element Modelling for Stiffness-Informed Differentiable Form-Finding			
			553	Axel Larsson and Sigrid Adriaenssens	Reduced Order Modeling of cable net structures with Graph Neural Networks			
SLOT 1	SESSION 5	Structural Morphology	COORDINATION: Kentaro Hayakawa			14:00 - 15:30	ROOM E	MONDAY 27
			414	Yuanyuan Li, Qian Zhang, Muge Qile, Jian Feng and Jianguo Cai	Modular Reconfigurable Multi-Stable Origami Metamaterial for Morphing Structures			
			429	Szymon Jankowski	Realisation of Prefabricated Geodesic Dome			
			424	Kentaro Hayakawa	Shape design of rigid- and flat-foldable grid origami structure on orthogonal dual grid			
SLOT 1	SESSION 6	Pavilion Competition.	COORDINATION: Marcos Ontiveros, Ronan Bolaños			14:00 - 15:30	ROOM F	MONDAY 27
			561	Juan José Castellón	Impluvium Redux: Folded Umbrella Structures for Ecological Urban Infrastructures.			
			445	Esther Zhang and Edward Segal	Heat-based form finding of gridshells made from 3D printed panels			
			491	Jorge Javier, Fernando Velasco, Daniel Perez, Johnathan Leon and Iván Valenzuela	Shellcraft - Recycled structure			
			568	Skylar Vollmer and Farzaneh Oghazian	ArchiCrochet: Bridging Architecture and Crocheting Through a Fabricated Tension Structure			
COFFEE BREAK						15:30 -16:00	LOBBY	

IASS 2025

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PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 2	SESSION 7	(WG 13) Computational Methods		COORDINATION: Naoki Solano		16:00 - 18:00	ROOM A	MONDAY 27
			530	Ricardo Maldonado-Ríos and Mauricio Gamboa-Marrufo	Effect of wind velocity on the distribution of pressure coefficients of hyperbolic paraboloid membranes due to fluid-structure interaction			
			567	Mark Hellrich, Pitipat Wongsittikan, Jackson Jewett and Josephine Carstensen	Graphic Statics Informed 2D Topology Optimization for Reinforced Concrete Beams			
			580	Mohsen Vatandoost, Mahmood Golabchi, Ahmad Ekhlassi, Morteza Rahbar and Peter von Buelow	On tradeoffs between structural, acoustic, and energy performance in the design of lightweight shell structures: ranking the Pareto front			
			591	Francesco Laccone, Neira Babovic, Elisabetta Savino, Luigi Malomo and Vittoria Laghi	Sustainable structural design of gridshells with reused components and AM nodes			
SLOT 2	SESSION 8	(WG 12) Timber and Bio-based Spatial Structures		COORDINATION: Luis Bastida		16:00 - 18:00	ROOM B	MONDAY 27
			462	Chih-Yao Chang and Pei-Hsien Hsu	Development of bamboo-based enclosure systems for modern residential applications			
			471	Sadra Khosravan, Agustin Colacce, George Siniora, Maximiliano Pena Huerta, Enrique Soriano, Gerard Bertomeuand Pep Tornabell	Geometrical and Structural Properties of Segmented Timber Planar Quad Meshes in Funnel Structures			
			474	Junaid Nabi and Roberto Naboni	Quasi-Voxel Structural Lamination Using Reclaimed Timber: Experimental and Numerical Investigation			
			479	Mingzhe Wang, Lichao Chen, Sihan Wang, Zekun Xun, Shu Ye and Gaohong Xu	Robotic Fabrication of a 3D Timber Reciprocal Structure			
			487	Jitske Swagemakers and Paul Mayencourt	Solid Wood Shells: Dimensional Lumber for Complex Geometry			
SLOT 2	SESSION 9	Metal Spatial Structures		COORDINATION: Isaura González Gottdiener		16:00 - 18:00	ROOM C	MONDAY 27
			392	Goni Josu, Borja Llorens and Ruben Fernandez	Efficient strategy to increase natural frequencies in pods of the new Red Sea Airport			
			407	Pengfei Zhao, Yulong Li, Wen Xue, Qiang Zhang, Changjie Ye and Ma Ming	Thoughts and Research on Seismic Concept Design of Long-span Structures			
			417	Toru Takeuchi, Yuki Terazawa, Yuri Yamaguchi, Tomohiko Kumagai, Tetsuo Yamashita, Koshiro Nishimura, Sujan Pradhan and Jun Fujiwara	Shake table test of scaled gymnasium frame with cylindrical arch roof – effects of friction dampers and collapse characteristics			
			421	Michael O'Shea	Case study - Steel space frame roof for sports centre building of oval plan shape – including consideration of progressive collapse potential			
			457	Qiuji Li, Zhiqiang Chen, Yifeng Liu, Weiguo Long, Yu Luo and Yuqiao Dong	Structural Design of the Complex Steel Roof for Terminal T3 of Sanya Phoenix International Airport			
			458	Tian Qiu, Yuan Feng, Liwei Wang, Wen Yang, Junli Ren, Zhenhua Yang, Xin Hu, Jiajun He, Chi Zhang and Xiaozhou Liu	The Roof Structural Design of Tianfu High-speed Railway Station			
SLOT 2	SESSION 10	(WG 17) Historical Spatial Structures	397	COORDINATION: Mónica Silva-Contreras, Sat Rihal		16:00 - 18:00	ROOM D	MONDAY 27
			397	Jorge Galindo-Díaz and Gilberto Flórez-Restrepo	Membrane Vaults Designed by Juvenal Moya-Cadena andGuillermo González-Zuleta (Colombia, 1951–1958)			
			398	Christopher Kitrick	Pioneering Geodesic Domes of T.C. Howard & Synergetics, Inc.			
			422	Maria I. Verhulst and Juan G. Oliva	Structural art in World Expositions: A laboratory for architectural and structural engineering			
			437	Anne-Sixtine Harlin and John Ochsendorf	The Structural Design of the Garabit Viaduct			
			454	Baris Wenzel and Christiane Weber	From physical models to digital shell calculation - The Evolution of Shell Design in the 1970s			
			617	Emanuele Cremona	Vernacular Tensegrity			
SLOT 2	SESSION 11	Structural Morphology		COORDINATION: Kentaro Hayakawa, Jianguo Cai		16:00 - 18:00	ROOM E	MONDAY 27
			430	Francesco Marmo, Davide Pellecchia, Eleonora Orefice and Luciano Rosati	A Geometric Approach for the Preliminary Design ofDeployable Geodesic Gridshells			
			449	John D'Amato and Edward Segal	A method for forming wood and thermoplastic gridshells			
			460	Michael Burt and Yehiel Roselnfeld	The Multi-Layered City			
			634	Maximilian E. Ororbia, Amir Motavaselian, Hua Chai, Ryan Welch and Masoud Akbarzadeh	Design of Concrete 3D Printed, Post-Tensioned Spanning Structures with Embedded Triply Periodic Minimal Surfaces			
SLOT 2	SESSION 12	Pavilion Competition.		COORDINATION: Marcos Ontiveros, Ronan Bolaños		16:00 - 18:00	ROOM F	MONDAY 27
			482	Georg Nawratil, Clemens Preisinger, Kiumars Sharifmoghaddam, Tomohiro Tachi, Yiwei Zhang and Rupert Maleczek	T-Umbrella: a case study for an inflatable rigid-ruling curved folding mechanism			
			648	Universidad La Salle	Arco Maya			
			627	Diana Alarcón, Benjamín Ortega and Miguel Sanchez	From Nature to Structure: Computationally Designed Bamboo Pavilion			
			311	Jose Luis Rangel, Rafael Hop, Emilio Montoya, Daniella Escobar, Kathleen Morales, Rosie Bay, Roger Castro, Cristina Carral and Laura Carolina Amezquita	Optimized Computational Design of a Corrugated Cardboard Pavilion with Minimal Waste and Integrated Connections			

IASS 2025

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TUESDAY, 28 OCTOBER 2025

ACTIVITIES						HOUR	PLACE	
REGISTRATION & COFFEE						8:00- 9:00	LOBBY	
PAPER PRESENTATIONS								
SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 3	SESSION 13	(WG 13) Computational Methods		COORDINATION: Peter von Buelow		9:00 - 11:00	ROOM A	TUESDAY 28
			596	Ricardo Enrique Morelos Perez and Christian Wolkowicz	Data driven Design to Production for Large Scale Projectsin Computational Design			
			620	Ali Alhussain, José P. Duarte and Nathan C. Brown	Stress-Guided Corrugated Geometry for 3D Concrete Printed Building Envelopes			
			624	Simone Maria Peter and Caitlin Mueller	Towards integrated layout and shape optimization of concrete slab-beam systems: Exploring design trade-offs in embodied carbon and manufacturability			
SLOT 3	SESSION 14	(WG 12) Timber and Bio-based Spatial Structures		COORDINATION: Alfonso Rivas Cruces		9:00 - 11:00	ROOM B	TUESDAY 28
			501	Augustin Lecomte, Oriane Guidet, Klaas De Rycke, Adam Orlinski, Martial Marquet and Marcos Garcia Rojo	Le manège – A straw “Archifolie” : A Pavilion with Load-Bearing Straw for the for the French Riding Federation at the Olympic Games 2024			
			505	Johannes Belz, Ahmadreza Ghazanfari, Matthias Rinnhofer-Cabuk, Marie-Theres Brunauer and Benjamin Kromoser	Increasing Material Utilization of Vertical Building Components made from Multi-Layered Unidirectional Strand Board: Basis for Optimization with the STO			
			526	Ipsita Datta and Ehsan Baharlou	Integrating Mycelium in Earth Construction: Redefining Structural Performance for Low-Carbon Building Materials			
			533	Manuel Fernando Martinez Forero, Andry Widyowijatnoko, Walter Mauricio Barreto Castillo and Jenny Magaly Pira Ruiz	A bamboo space reticulated system with prefabricated joints.			
			541	Lukas Kirschnick, Paing Su Ko, Vivienne Gladitz, Thomas Pearce, Jan Willmann and Frank Bauer	Design and fabrication of wooden grid shells using small-diameter timber			
SLOT 3	SESSION 15	Metal Spatial Structures		COORDINATION: Lucia Zesati		9:00 - 11:00	ROOM C	TUESDAY 28
			484	Jian Zhou, Chao Peng, Yaokang Zhang, Leming Gu, Haixia Liu	Design of the Large-Span Steel Roof Structure with Fully Hinged Column Bases			
			507	Guojun Sun, Hao Zhang, Yu Xue, Deqing You, Jie Qin, Jinzhi Wu	Study on the Static Performance and Progressive CollapseResistance of Hybrid Rigid-Flexible Boundary Cable Net Structure			
			508	Guojun Sun, Xingpeng Ma, Jinzhi Wu, Yu Xue, Xiongyan Li and Suduo Xue	Mechanical Performance Enhancement of Bolt-Spherical Grid Structures: Prefabricated Folded-Plate Sleeve Reinforcement for Compression Members			
			513	Paul Kassabian, Rebecca Lubrano, Christian Sjoberg, Alexandra Toivonen, Ines Brotons and Dewitt Godfrey	Iterative Improvement on Structural Sculptures			
			539	Valentina Tomei, Marina Serpe, Ernesto Grande and Maura Imbimbo	Enhancing Sustainability in Gridshell Design: An Optimization Framework for Integrating Reclaimed Steel Members			
			540	Yuki Nagai, Mutsuro Sasaki and Motoshi Inukai	Structural Design of the Kagawa Prefectural Arena Design of a single layer two way grid dome stiffened by diagonal brace using h-shaped steel			
SLOT 3	SESSION 16	(WG 17) Historical Spatial Structures		COORDINATION: Sat Rihal, Marisela Mendoza		9:00 - 11:00	ROOM D	TUESDAY 28
			495	Masafumi Tanaka	Reevaluation of the structural features and architectural techniques of the "Former Kagawa Prefectural Gymnasium" designed jointly by Kenzo Tange and Takeshi Okamoto			
			509	Eisuke Mitsuda, Tomohiro Inoue and Tomoka Maruhashi	3D scanning of the 65-year-old HP shell to determine its geometry and structural analysis			
			535	Fawen Zhu and Jiang Feng	An unrealized 40 meter span brick thin-shell structure in China around 1960			
			569	Brett Schneider, Gina Morrow and Guy Nordenson	Translation of Cascade Stairs			
			572	Edwin Gonzalez Meza, Maria Guadalupe Éstrada Meza and Jessica Lisbeth Aguilar Calvillo	Fragments, Forces, and Forms: Günter Günschel as Forerunner of Experimental Design Culture			
			459	Tsukiji Satoh, Masao Saitoh, Kento Matsui and Akira Miyata	Re-evaluation of the Design and Construction Techniques of Yoyogi National Stadium First Gymnasium, the Source of the Development of Spatial Structures in Japan			
			612	Laila Gabriela Cordero Espinosa	Cosmic Rays Pavilion: “From Geometric response to the built project”.			
SLOT 3	SESSION 17	(WG 5) Continuous Shells		COORDINATION: Stefano Gabriele		9:00 - 11:00	ROOM E	TUESDAY 28
			402	Marilyn Johnson and Shengzhe Wang	Geo-structural Mechanics of Hypar Foundations: Revisiting Félix Candela’s Thin-shell Footings via Finite Element Analysis			
			436	Gabriel Lopez Rodriguez and Carlos Llopis Llopis Camps	Design process of the steel folded plate frame envelope of the station of Vasco de Quiroga in Tren Interurbano Mexico-Toluca			
			439	Lucia Mariani, Valerio Varano, Stefano Gabriele, Leopoldo Greco and Massimo Cuomo	Optimizing shape transition in morphing shells			
			517	Lotte Scheder-Bieschin, Tom Van Mele and Philippe Block	Scalability of the Unfold Form Construction System			
SLOT 3	SESSION 18	Advanced Manufacturing and Materials		COORDINATION: Ronan Bolaños		9:00 - 11:00	ROOM F	TUESDAY 28
			498	Yangzhi Li, Xiheng Yan and Shuaizhong Wang	Upcycled Dome Structures: Incorporating Reused Concrete Rubble through Digital Fabrication			
			628	Braden Lawrie, Dylan Wood, Paul Mayencourt and Erica Fischer	Fabrication aware optimization of veneer-based mass timber panels: integrating, geometric, structural, and fabrication objectives			
			630	Hasegawa Dan, Inaba Yosuke, Junichiro Ito, Masayuki Takiguchi, Yasunori Harano and Masamichi Sasatani	Experimental Study of Structural Paper Tubes for Use in Dome Structures			
			638	Faidra Oikonomopoulou, Daniel Massimino, Swornava Guha, Thomas Bigler, Eloy van Kessel, Telesilla Bristogianni and Kaitlyn Becker	Reversible joinery methods for full glass vaults made of cast or 3D printed glass components			
			536	Kyoya Watanabe, Takashi Aoki and Katsuhiko Imai	Dynamic Live Floor −Technology to resolve vibration problems caused by crowds in halls and arenas −			
			478	Miho Yamashita, Hatsutaro Tanaka, Hiroki Ogura, Tadahiro Nakajima and Shinya Yamamoto	Expansion of the Application of 3D Printing Technology to Architectural Structures in Real Buildings			
COFFEE BREAK						11:00-11:10	LOBBY	

IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

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TUESDAY, 28 OCTOBER 2025

PLENARY SESSION KEYNOTE SPEAKERS

GUY NORDENSON:	Construction and Interpretation: Structure, Form and Architecture	11:10- 11:55	ROOM A	TUESDAY 28
COLECTIVO C733- GABRIELA CARILLO -lider-:	Colectivo C733. Cross-Cutting Dissections	11:55-12:40		
HANGAI PRIZES Presentations:				
Junwei Pan	Chiral Bistable Kirigami Metamaterials	12:40-13:00		
LUNCH		13:00-14:00		

PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 4	SESSION 19	Computational methods for design, control, and optimization of lightweight and smart structures		COORDINATION: Jianguo Cai		14:00 - 15:30	ROOM A	TUESDAY 28
			434	Annamaria Longobardi, Daniele Lancia and Sergio Pone	Two-way Reciprocal Frame			
			448	Ryuya Toyooka and Tomohiro Tachi	Programming curvature by bilayered bistable hinged tessellation			
			558	Yuqian Liu and Ting Cao	Component-reusable prestressed gridshells based on smooth poly-hypar surface structures			
			560	Maria Guadalupe Estrada Meza, Giancarlo Di Marco and Edwin Gonzalez Meza	Optimization of Reinforced Concrete Cantilevers Inspired by the Geometry of 16th-Century Mexican Ribbed Vaults			
SLOT 4	SESSION 20	(WG 12) Timber and Bio-based Spatial Structures		COORDINATION: Jimena Torre Rojas		14:00 - 15:30	ROOM B	TUESDAY 28
			544	Kevin Moreno Gata, Florian Spahn, Andreas Wintraken, Sven Klinkel and Martin Trautz	From Tree Growth to Structural Design			
			571	Brett Schneider	Göz Dolma – Hybrid Structures of Wood and Stone			
			573	Oscar Pabon, Carlos Lazaro, Caori Takeuchi and Jaime Peña	Structural design of a bamboo culm lattice shell roof			
			574	Maria Naissi and Martin Trautz	Vacuum infiltration of biobased and synthetic polymers for enhancing the bending strength of wood			
SLOT 4	SESSION 21	Metal Spatial Structures		COORDINATION: Alejandra Ruiz Limas		14:00 - 15:30	ROOM C	TUESDAY 28
			548	Nishi Ryota, Jun Fujiwara, Tatsuya Asai and Kunio Mizutani	A Shake-Table Test of a Scaled Steel Gymnasium with Gabled Roof on Seismic Damage Assessment Part 2: Seismic Response and Damage of Nonstructural Components			
			556	Xiaowei Liu, Yue Yang and Yuanwen Ouyang	Form and Force: An Innovative Engineering Practice of a Fishnet-Shaped Double-Layer Aluminum Alloy Grid Shell			
			559	Leming Gu, Mingzhuo Rui, Haixia Liu, Laizhu Jiang and Jie Chen	A Movable Stainless Steel Structure Low Carbon Design Near Sea			
			564	Jun Fujiwara and Nishi Ryota	A shake-table test of a scaled steel gymnasium with gabled roof on seismic damage assessment Part 1: Overview of the shake-table test and global responses of target structure			
SLOT 4	SESSION 22	Repair and Adaptive Reuse: The Future of 20th Century Historic Concrete Shells		COORDINATION: Sat Rihal, Marisela Mendoza		14:00 - 15:30	ROOM D	TUESDAY 28
			475	Zi Wang, Xuguang Sun, Yanbin Shen and Ziyu Tu	Active control of suspended-dome structures : theoretical analysis and experimental study			
			481	Dina Dorothea Falbe, Lea Sophie Möller and Matthias Ludwig	Best Practice: Restauration of Concrete Shell Buildings by Ulrich Müther in Germany			
			594	Alexandra Steelman, Gina Morrow, Xiaoxiao Wu and Guy Nordenson	Phase Change: Transforming a Historic Reservoir for the Exhibition of Light and Sound			
			635	Satwant Rihal, Hisham Assal and Fernando Peña	Perspectives on the AI/ML applications to the Seismic Performance of Historical Domes and Vaults			
SLOT 4	SESSION 23	(WG 5) Continuous Shells		COORDINATION: Stefano Gabriele		14:00 - 15:30	ROOM E	TUESDAY 28
			525	Bosheng Liu, Ching-Yu Tseng, Yen-Lun Chen, Chyi-How Lay	Alkali Activation Material Compressed Bricks on Topological Interlocking Flat Vaults			
			597	Arianna Venettoni, Valerio Varano and Stefano Gabriele	RFun: a Grasshopper plug-in for analyzing Relaxed Funicularity of shells			
			618	Mauricio Díaz Valdés and Juan Gerardo Oliva Salinas	Structural Efficiency Through Triangular Morphologies: Design and Analysis of a Pavilion with Henequen Fiber Connections			
			622	José Luis Encarnación Miranda	Digital Structural Analysis Models of the Architectural Precast Concrete Shell			
SLOT 4	SESSION 24	Structural Morphology		COORDINATION: Naoki Solano		14:00 - 15:30	ROOM F	TUESDAY 28
			546	Munkyun Lee, Joseph Gattas and Tomohiro Tachi	Multistable Curved-Crease Origami Blocks for ReconfigurableModular Building System			
			557	Andrea Micheletti, Claudio Intrigila, Filipe A. dos Santos, Simon D. Guest and Alessandro Tiero	Self-Stressed Tensegrity-Origami Structures with Programmed Geometrically Nonlinear Response			
			607	Stephanie Bachir, Christian Hamm, Toni Kotnik	Morphological Insights from Asterolampraceae for the Development of Bio-inspired Shell Structures			
COFFEE BREAK						15:30-16:00	LOBBY	

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PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 5	SESSION 25	Computational methods for design, control, and optimization of lightweight and smart structures		COORDINATION: Mariana Neri		16:00 - 18:00	ROOM A	TUESDAY 28
			432	Ruoqiang Feng, Lang Wang and Yuting Zhong	Low-Carbon Greenhouse Design Optimization Across Climate Zones			
			455	Tatsuya Yamada, Hideto Tanaka, Takayuki Hirayama, Yu Kurose and Junpei Seto	Structural Design of "PEACE STADIUM Connected by SoftBank"			
			463	Daniel Briem, Nico Porsch, Spasena Dakova and Oliver Sawodny	Modeling of Adaptive Structures with Nonlinear Elements and System Analysis using Proper Orthogonal Decomposition			
			469	Aaron Wagner, Edgar Schefer, Alexander Reiner, Laura Kiesewetter, Axel Körner, Achim Menges and Jan Knippers	Computational Design Framework for Functionally Graded Self-Shaping Wood Structures			
			472	Marco Meloni, Qian Zhang, Seungdeog Kim and Jianguo Cai	Kirigami canopy for enhancing outdoor comfort through light modulation			
			485	Fahimeh Yavartanoo, Damon Bolhassani, Masoud Akbarzadeh, Maximilian E. Ororbia and Hua Chai	Advanced Finite Element Modeling of 3D-Printed Post-Tensioned Concrete Beams with Experimental Validation			
			583	Chloe Soo Hwa Hong, Keith Janghyun Lee and Caitlin Mueller	Deep reinforcement learning for efficient exploration of combinatorial structural design spaces			
SLOT 5	SESSION 26	(WG 12) Timber and Bio-based Spatial Structures		COORDINATION: Alfonso Rivas cruces		16:00 - 18:00	ROOM B	TUESDAY 28
			576	Adam Orlinski, Klaas De Rycke and Petr Buianov	Parametric Design and Modular Timber Systems: The Bahrain National Pavilion at Expo 2025			
			582	Celina Hunschok, Annette Bögle and Karsten Schlesier	Designing structures with low-strength bio-based materials: A material-driven approach			
			588	Emmanuel Vercruysse, Kate Davies and James Solly	A FOREST DATUM The use of crown timber in a structural system			
			590	Gabrielle Nicolas, Ahmed Soliman, Lars De Laet and Didier Snoeck	Designing from Waste: Computational Reuse of Formwork Wood in Lightweight Structures			
			601	Oliver Moldow, Skylar Tibbits, Paul Mayencourt and Caitlin Mueller	Reciprocal Fabrication: Zero-waste cuts for shaped timber beams			
			486	Kenji Nagayama, Tadashi Yoshihara and Futo Yamada	Mitsubishi Pavilion			
SLOT 5	SESSION 27	(WG 17) Historical Spatial Structures		COORDINATION: Sat Rihal, Marisela Mendoza		16:00 - 18:00	ROOM C	TUESDAY 28
			461	Mónica Silva Contreras	The Cristo Obrero Church: from industrial facilities to cover a sacred space in Dieste's experimental forms			
			598	Marisela Mendoza Ramos	Adaptive Architecture: The future of 20th Century historic concrete shells in the UK.			
			600	Luis Manuel Ochoa Sosa	"A Leap Like a Frog: Between the Loss of Identity and the Construction of a Myth" The Kiosko-Auditorium of Plaza de España in Barakaldo, Greater Bilbao			
			609	Simone Barbi	Knitting the span. On Raffaello Fagnoni's structural language, from the archive to the built work			
			611	Guy Nordenson, Alexandra Steelman and Jose Jose Ladron de Guevara	If Buildings Could Fly: PL Nervi's Palazzo del Lavoro, Turin IT			
			647	Juan Ignacio del Cueto, Andrés López	A hidden treasure: Candela's peculiar umbrellas at the suit factory (Coyoacán, Mexico City, 1954)			
SLOT 5	SESSION 28	Retractable Roofs Tanks and Silos Masts and Towers		COORDINATION: Alejandra Ruiz Limas		16:00 - 18:00	ROOM D	TUESDAY 28
			415	Ryota Matsumoto and Hidekatsu Takayama	Development structure and construction methods of a hat-shaped silo roof.			
			531	Yaxiong Yao	Design of a Retractable Arena Roof with Cable-Arch Structures			
			575	Justin Binder, Carlos De Oliveira and Jennifer Pazdon	Cast Steel Node Solutions for Complex Multi-Planar Tubular Connections on NASA Mobile Launcher 2			
			633	Jose Raul Martinez Zayas and Jacqueline González Zavala	Dynamic Behavior of Water Tanks Under Seismic Excitations in Mexico City			
			636	Sudarshan Krishnan	Floating Roofs: The Role of Stayed Masts in Membrane Architecture			
SLOT 5	SESSION 29	Pneumatic Structures Construction Methods & Quality Controls		COORDINATION: Vanessa Nagel		16:00 - 18:00	ROOM E	TUESDAY 28
			406	Jun Ariga and Naoji Agarie	Integration of Architecture, Structure, and Construction Utilizing Regional Characteristics: JTA Dome Miyakojima			
			426	Li Xikui, Wu Xiaoping and Qilin Zhang	The influence matrix method in unloading analysis of temporary supports for space structures			
			443	Kevin Morales, Yuler Morales, Juan Gerardo Oliva and Serafín Castañeda	Automated system for the geometric assembly of nodes and connectors on translation gridshells generated with GEOG			
			452	Jared Vogel, Patricia Dunn and Mostafa Akbari	Pneumatic Fabric Formwork for Thin Shell Structures			
			453	José Enrique Hernández Díaz, Ronan Bolaños Linares, Gustavo Arturo Marquez Flores and Maribel Jaimes Torres	Cacomixtle: Double-curved precast mold automation plugin			
SLOT 5	SUPORT SESSION A			COORDINATION: Elisa Drago		16:00 - 18:00	ROOM F	TUESDAY 28
	(WG 22) Architectural Geometry		480	Shinya Asaoka and Ryohei Adachi	Cantilevered roof achieved by asymmetric folded-plate structure			
	Advanced Manufacturing and Materials		427	Kanako Ikemoto, Tatsushi Heguri, Ryota Yanagiya and Shin Takamatsu	The Ideas and Processes of Membrane Structure Utilizing "Nishijin Textile" as an Exterior Material			
	(WG 6) Tension and Membrane Structures		413	Tatsushi Heguri	Spatial structures (especially membrane structures) at the 2025 Japan World Exposition (Osaka-Kansai expo)			
	Repair and Adaptive Reuse: The Future of 20th Century Historic Concrete Shells		648	Nic Goldsmith	Adapting the Past with Innovative Structures			
	Metal Spatial Structures		405	Yasukazu Izawa, Hiroki Mukai, Kazumasa Okabe, Kai Toyama	Structural design of large roof with complex geometries			

IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

*This program may change

WEDNESDAY 29, OCTOBER 2025

ACTIVITIES					HOUR	PLACE	
REGISTRATION & COFFEE					8:00- 9:00	LOBBY	
PAPER PRESENTATIONS							
SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 6	SESSION 30	Computational methods for design, control, and optimization of lightweight and smart structures		COORDINATION: Lucia Zesati		9:00 - 11:00	ROOM A	WEDNESDAY 29
			489	Fahimeh Yavartanoo, Damon Bolhassani, Masoud Akbarzadeh, Yao Lu, Joseph Yost and Boyu Xiao	Numerical Modeling and Structural Analysis of Compression-Dominant Multi-Layer Funicular Glass Bridges			
			503	Marcio de Souza and Ruy Marcelo Pauletti	A computational tool for the design cycle of tensile structures inside a parametric workflow.			
			504	David Afonso	Structural Designer: A new form-finding plugin for Rhinoceros3D with Dynamic Relaxation			
			510	Nobuhide Yamaga	Structural Design of Irregularly shaped buildings			
			511	Amedeo Manuello Bertetto, Jonathan Melchiorre, Giuseppe Carlo Marano and Bernardino Chiaia	Sustainable Gridshell Optimization: A Metaheuristic Approach to Minimize Environmental Impact and Construction Complexity			
			515	Carlos G. Gomes, Marja-Lisa Herrmann, Alexander Scholzen, Simon Klarmann, Sven Klinkel and Rostislav Chudoba	A digital strategy for managing geometric manufacturing deviations in modular carbon-reinforced concrete origami structures			
SLOT 6	SESSION 31	Advanced Manufacturing and Materials		COORDINATION: Viridiana Zavala		9:00 - 11:00	ROOM B	WEDNESDAY 29
			408	Asko Fromm, Rolf Gross, Melanie Schomann and Florent Keller	Method of manufacturing a multifunctional concrete component			
			411	Giancarlo Di Marco and Lok Hang Cheung	Real-Time Defect Detection, Analysis and Suggestion in Adaptive 3D Concrete Printing via Multimodal LLM Integration			
			416	Grace Melcher and Mark Waggoner	Building ICONs Catenary Dome: A Framework for 3D Printing Shell Structures			
			431	Hiroki Awaji	Development of a Curved Wooden Shell Design and Manufacturing Method through the Integration of Self-Shaping Wood and Molded Plywood Techniques			
			563	Yuval Harel, Eran Sharon and Arielle Blonder	Direct Fiber Placement for Customizable Self-Morphing of Frustrated Composite Sheets			
SLOT 6	SESSION 32	(WG 12) Timber and Bio-based Spatial Structures		COORDINATION: Sat Rihal		9:00 - 11:00	ROOM C	WEDNESDAY 29
			608	Robert Fuse and Cristian Cabezas	Orthotropic Direction Efficiency in Complex Thin-Shell Timber Plate Structures			
			623	Fatima Liliana Pinedo Garcia, Valeria Suray Peña Calle, Cristian Fernando Malpartida Vasquez, Jesús Abel Peña Chávez, Doris Esenarro Vargas and Pablo Cobeñas Nizama	DOMOTECH Hybrid technology dome of bamboo slats in active bending with vegetal cover for rest areas			
			625	Ronan Bolaños, Brandon Velázquez and Marcos Ontiveros	Parametric design and digital fabrication of a double curvature lightweight bent plywood carapace pavilion			
			632	Isuru Nanayakkara and Tomás Méndez Echenagucia	Automated analysis of 2D timber structural elements and connections using the stress field method			
SLOT 6	SESSION 33	(WG 22) Architectural Geometry		COORDINATION: Mauricio Díaz		9:00 - 11:00	ROOM D	WEDNESDAY 29
			401	Akira Tanaka	Evaluation of Block Shape Effects on Structural Performance in String Crescent Structure Using Nonlinear Analysis			
			420	Ren Nagatomo, Kazuki Hayashi, Romain Mesnil and Makoto Ohsaki	Structural behavior of deployable bilayer auxetic metamaterials: A comparison of triangular and square unitdesigns			
			423	Saba Robati and Mohammadjavad Mahdavinejad	Beyond High-Tech Architecture: Weaving Indigenous Craft and Jamming Innovation into Sustainable Funicular Shells			
			468	Mark Sarkisian, Eric Long, Alessandro Beghini, Abel Diaz and Jacqueline Li	Los Angeles County Museum of Art: Architectural Innovation through base isolation and Exposed Concrete			
			473	Yu-Chou Chiang	Self-Airy shells consisting of unreinforced boundaries and planar quadrilaterals			
SLOT 6	SESSION 34	Ai _informed Structural Engineering and design		COORDINATION: Mark Tam, Rob Otani, Lazlo Bleker		9:00 - 11:00	ROOM E	WEDNESDAY 29
			418	Chi-Tathon Kupwiwat	Comparing Multi-task Reinforcement Learning and Multi-agent Reinforcement Learning for Multi-objective Optimization of Trusses			
			451	Lazlo Bleker, Kam-Ming Mark Tam and Pierluigi D'Acunto	Graph Neural Network Message Passing-Based Structural Form-Finding Using Combinatorial Equilibrium Modelling			
			477	Luis Borunda	Machine Learning for Force Geometry: A Homology Model for Stress-Informed Shells			
			578	Gabriele Mirra and Lisa-Marie Mueller	A Reinforcement Learning Agent for Enhancing the Reuse of Structural Components in New Buildings			
			493	Jonathan Melchiorre, Amedeo Manuello Bertetto, Giuseppe Carlo Marano and Sigrid Adriaenssens	Human-In-The-Loop Approach for Integrating Creativity into Structural and Architectural Optimization			
			527	Tao Sun, Lazlo Bleker, Mustafa Cem Günes, Pierluigi D'Acunto	Automated Visualization for Structural Form-Finding using Orchestrated Multimodal Machine Learning Agents			
SLOT 6	SESSION 35	(WG 20) Teaching of Shell and Spatial Structures		COORDINATION: Alireza Behnejad		9:00- 11:00	ROOM F	WEDNESDAY 29
			442	Edoardo Sesti, Valerio Varano, Stefano Gabriele and Daniele Calisi	Integrating Structural Form Finding and Architectural Design with a Holistic Teaching Approach			
			466	Federico Garcia Lammers	Anarchist struggles beneath the gaussian vaults of the TEM Factory in Montevideo, Uruguay			
			577	Emily Baker, Mohamed Ismail, Malini Srivastava and Chango Cummings	Catalyst 2025: Teaching an Array of Approaches to Structural Integration and Material Reuse			
			584	Vincent Stiehle, Annette Bögle and Celina Hunschok	Expanding Architectural Design Processes Through Structural Optimization: A Multidisciplinary Perspective			
COFFEE BREAK						11:00-11:10	LOBBY	

IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

*This program may change

WEDNESDAY 29, OCTOBER 2025

PLENARY SESSION KEYNOTE SPEAKERS

JAN KNIPPERS:	Integrative Desing for Transformative Architecture	11:10- 11:55	ROOM A	WEDNESDAY 29
JUAN GERARDO OLIVA SALINA	Lightweight structures: learning and teaching, designing and building	11:55-12:40		
HANGAI PRIZES Presentations:				
Yefan Zhi	Surface-Toolpath Twins of Shell Components in 3D Concrete Printing for Optimized Buildability and Surface Quality	12:40-13:00		
LUNCH		13:00-14:00		

PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 7	SUPORT SESSION B			COORDINATION: Elisa Drago		14:00 - 15:30	ROOM A	WEDNESDAY 29
	(WG 5) Continuous Shells		514	Izel Ece Yilmaz and Kutlu Darilmaz	Optimization of Hyperbolic Paraboloid Reinforced Concrete Shell System on a Sample Model			
	(WG 13) Computational Methods		614	Jiaying Wei, Juney Lee and Joshua Bard	Sequencing optimization of stability-aware robotic assembly for discrete frame structures			
	(WG 13) Computational Methods		502	Hanbing Zhao and Shuaizhong Wang	A Computational Framework Designed for the Reuse of Concrete Framing			
	Advanced Manufacturing and Materials		518	Barrak Darweesh and Simon Schleicher	Non-Planar Granular 3D Printing - Advancing Material Versatility and Reuse Through Multi-Axis Fabrication			
SLOT 7	SESSION 36	Computational methods for design, control, and optimization of lightweight and smart structures		COORDINATION: Mariana Neri		14:00 - 15:30	ROOM B	WEDNESDAY 29
			516	Edith Gonzalez, Matthias Ridder, Stephan Moser, Axel Körner, Larissa Born, Robert Weitlaner, Götz Gresser and Jan Knippers	Flectuation: Bio-Inspired Responsive Envelopes for Sustainable Building Performance			
			519	Lennert Loos and Alessio Pelagalli	Load space adventures: representations of structural generality			
			520	Lennert Loos and Alessio Pelagalli	Repurposing of existing structures through the application of discrete topology optimisation			
			522	Ferre Maes, Roméo Delcroix, Lars De Laet, Niels De Temmerman and Bert Belmans	Spatial Structures against Urban Heat Islands: Quantifying Thermal Impacts of Shading Structures on Public Squares			
SLOT 7	SESSION 37	Advanced Manufacturing and Materials		COORDINATION:Viridiana Zavala		14:00 - 15:30	ROOM C	WEDNESDAY 29
			456	Giancarlo Di Marco, Ho Man Yau and Davide Lombardi	Stress-Informed Non-Planar Slicing for 3D Concrete Printing			
			500	Shaoyi Wang and Simon Schleicher	Conformal 3D printing on bending-active formwork structural implications of toolpath strategies and interlayer timing			
			497	Barrak Darweesh, Yasaman Yavaribajestani, Shaoyi Wang, Todd Zhou, Lydia Moog and Simon Schleicher	Conformal 3D printing on bending-active formwork - exploring a new approach to the fabrication ofwide-spanning structures			
SLOT 7	SESSION 39	Recent advances in design and analyses of continuum shell structures		COORDINATION: Mauricio Díaz		14:00 - 15:30	ROOM D	WEDNESDAY 29
			428	Yifeng Liu, Qiuji Li, Yuqiao Dong, Mingdian Xie and Peng Pan	Engineering practice of a novel steel-grid concrete composite shell			
			476	Hector Guerrero, Jose Alberto Escobar, Karla Guerrero ,Victor Cecilio	On the seismic response of shell structures equipped with seismic isolation in earthquake-prone areas			
			570	Vinicius Gamboa Faria, Isabel M. de Oliveira, Ruy Marcelo Pauletti and Leila Valverdes	Three-layered model for the design of concrete shells: implementation in a parametric environment			
SLOT 7	SESSION 40	Temporary Spatial Structures		COORDINATION: Juan José Castellón		14:00 - 15:30	ROOM E	WEDNESDAY 29
			492	Ellen Leemans, Niels De Temmerman and Lars De Laet	Upscaling reusable modular plate structures			
			524	Sohyun Jin and Daniel Daniel Cardoso Llach	Design, material, and structural aspects of friction-based spatial structures: the case of a "minimal making grammar"			
			534	Ahmed Soliman, Laura Recker, Lars De Laet, Tine Tysmans and Niels De Temmerman	Exploring the use of planar scissor structures as actuation falsework systems for segmented singly curved shells			
COFFEE BREAK						15:30-14:00	LOBBY	

IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

*This program may change

WEDNESDAY 29, OCTOBER 2025

PAPER PRESENTATIONS

SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 8	SESSION 41	Computational methods for design, control, and optimization of lightweight and smart structures		COORDINATION: Luis Bastida		16:00 - 18:00	ROOM B	WEDNESDAY 29
			532	Xuanzhi Li, Suduo Xue, Yue Liu and Zhanyuan Gao	Research on the Establishment Method of the Fine Model of the Spoke Cable Structure and the Morphology of the Cable Breakage			
			538	Garvin Goepel and Kristof Crolla	Pioneering Deployable Bending-Active Bamboo Shells: A Computational and AR-Assisted Construction Approach			
			547	Valentin Gomez-Jauregui, Angela Carrillo-Rogriguez, Jose-Andres Diaz-Severiano and Noemi Barral-Ramon	Analysis of Efficient Foldability of Deployable Double-Layer Tensegrity Grids			
			550	Sutharsanan Navaratnarajah, James Kratz and Mark Schenk	Parametric Design For Curved-Crease Origami Structures			
			592	Arman Khalilbeigi Khameneh, Armin Mostafavi and Alicia Nahmad Vazquez	Gamified Informed Decision-Making for Performance-Aware Design by Non-Experts: An exoskeleton design case study			
SLOT 8	SESSION 42	Advanced Manufacturing and Materials		COORDINATION: Susana Ezeta		16:00 - 18:00	ROOM C	WEDNESDAY 29
			523	Bosheng Liu, Chien-Chun Su, Ting-Wei Hsu and Chyi-How Lay	Biochar AAMs Concrete Vaulted Compression Floors from Carbon-Binding Industrial Waste			
			537	Hastia Asadi, Robert Wegner, Edith A. Gonzalez, Larissa Born, Axel Körner, Götz T. Gresser and Jan Knippers	Multilevel Design Algorithm for 3D Branched Structures Composed of Braided FRP			
			543	Cedric Wehren, Johannes Kellerwessel, Rahul Sharma, Uwe Reisgen and Martin Trautz	Additive Sheet Forming via Directed Energy Deposition: A theoretical study on basic welding patterns and curvature			
			549	Ofri Dar, Hagar Ofek, Eran Sharon and Arielle Blonder	Ruffled Clay: Expanding Self-Shaping Design Possibilities			
SLOT 8	SESSION 43	(WG 22) Architectural Geometry		CORDINATION: Mauricio Díaz		16:00 - 18:00	ROOM D	WEDNESDAY 29
			512	Renan Prandini and Jan Knippers	Adaptive Reciprocally Framed Tessellation for doubly curved surfaces			
			521	Toby Mitchell, William Baker, Allan McRobie, Petia Tzokova, Marina Konstantatou and Masaaki Miki	The Schaefer-Gurtin stress function: completing the Airy function for shell form-finding			
			529	Jack Young, Xan Browne, Oliwia Pindel and Phil Ayres	Curved by Craft: Kagome weaving principles in architecturaltimber lattices			
			555	Balaji Rajasekaran	Long-Span Shell structures: Synergies of Form, Forces, Material and Construction			
			562	Kenryo Takahashi	Design and construction of a tensile roof for the Luxembourg Pavilion at Expo 2025: a case study on the practical application of a combined graphical and numerical form-finding approach			
SLOT 8	SESSION 44	(WG 6) Tension and Membrane Structures		COORDINATION: Juan Gerardo Oliva		16:00 - 18:00	ROOM E	WEDNESDAY 29
			409	Jae Yeol Kim, Hooi Min Yee, Puteri Nurul Aina Asmady, Syahrul Fithry Senin and Esther J.Susel Anak Rangen	Mathematical Wave Shape in Tensioned Fabric Structures			
			419	Jianhui Hu, Jian Zhang, Wujun Chen, Wujun Chen, Paolo Beccarelli, Yi Xu, Saishuai Huang, Takhir Razykov, Kazuki Hayashi and Nilufar Avezova	Performance degradation analysis of weathering aging ethylene tetrafluoroethylene (ETFE) foils via micro-characterization			
			464	Andrzej Rutkiewicz	Different stable configurations of the non-minimal prismatic tensegrities			
			488	Weijing Zhang and Yuan Li	Study on resistance to progressive collapse of a suspen-dome structure with CFRP radial cables			
SLOT 8	SESSION 45	(WG 20) Teaching of Shell and Spatial Structures		COORDINATION: Alireza Behnejad		16:00 - 18:00	ROOM F	WEDNESDAY 29
			585	Gina Morrow and Xiaoxiao Wu	Alphabet of Lines: Teaching Structural Principles with Engineering Graphics			
			589	Farzaneh Oghazian	Computational Methods in Teaching Thin Shell Structures to Architecture Students			
			604	Orsolya Gaspar, Luisa Caldas and Csaba Both	The Power of the Story – Teaching Spatial Structures for Architects in a Studio-Based Learning Environment			
			613	Brianna Bussinger, Sasquia Obata, Alfonso Pappalardo Junior, Fabiola Rago Beltrame, Magda Aparecida Salgueiro Duro, Camila Calegari Marques, Ruy Pauletti, Leila Cristina Menghetti Valverdes, Mariana Diaz Leites	Dieste-Inspired Bamboo Pavilion: A Design-Test-Build Workshop			
			626	Marcos Ontiveros	Playful Teaching of Lightweight Structures			

IASS 2025

PROGRAM Day By Day/Working Groups and Special Sessions/ Last Update: 27/10/2025

*This program may change

THURSDAY 30, OCTOBER 2025

ACTIVITIES					HOUR	PLACE	
REGISTRATION & COFFEE					8:00- 9:00	LOBBY	
PAPER PRESENTATIONS							
SLOT	SESSION	TOPIC	ID	AUTHORS	TITLE	HOUR	ROOM	
SLOT 9	SESSION 46	Computational methods for design, control, and optimization of		COORDINATION: Marcos Ontiveros		9:00 - 11:00	ROOM A	THURSDAY 30
			610	Jose Luis Rangel, Agustín Ortega and Emilio Montoya	Computational Design of Lightweight Modular Shells			
			619	Christine Yogiaman, Kenneth Tracy, Jaimin Korat, Ying Yi Tan and Giovanni Vigano	Design Workflow for Cable Tensegrity Shell Structures			
			629	Chisung Kim, Benjamin Rider, Lauren Stewart, Kimberly Kurtis and Edvard Bruun	Towards A Design-to-Fabrication Workflow for 3D Concrete Printed Drainage Invert Shell Structures			
			637	Yao Lu	Objective-driven form-finding in algebraic 3D graphic statics via linear programming			
SLOT 9	SESSION 47	Advanced Manufacturing and Materials		COORDINATION: Naoki Solano		9:00 - 11:00	ROOM B	THURSDAY 30
			581	Niklas Mueller and Martin Classen	Additive Manufacturing of Topology-Optimized Lightweight Slabs Using Foam Concrete			
			586	Rui Liu	BART shell [bending-active reciprocal thin shell]			
			587	Alexandra Steelman, Xiaoxiao Wu, Gina Morrow and Guy Nordenson	Designing with Marble: A Computational Approach to Large-Scale Marble Structures			
			606	Christoph Klemmt, Connor Kasner and Rajat Sodhi	Concrete Surfaces: Utilization of Freeform Molds made from Flat Sheet Material for Concrete Casting			
SLOT 9	SESSION 48	(WG 22) Architectural Geometry		COORDINATION: Juan Gerardo Oliva		9:00 - 11:00	ROOM C	THURSDAY 30
			565	Claire Djang and Stefano Arrighi	Constructing three-dimensional quasicrystalline assemblies			
			593	Hiroki Tamai	Form finding of spoke wheel systems using Airy stresspolyhedra			
			621	Daniel Romero Basurto and Moises Alonso Escarcega Olivares	Geometry and Heritage: Digital Reconstruction of Concrete Shells from Photographic and Descriptive Documentation			
			631	Edgar Humberto Montejano Hernandez	Hybrid Lattice Systems: Integrating Composite Shells with Resource-Efficient Wood Lattices			
			639	Ruy Pauletti	3DNFDM - A Force Density Method for 3D problems			
SLOT 9	SESSION 49	(WG 6) Tension and Membrane Structures		COORDINATION: Valeria Mendez		9:00 - 11:00	ROOM D	THURSDAY 30
			496	Chie Matsuo, Honami Hosokawa, Taketoshi Nakayama, Teruhiro Okuya and Norihiro Ejiri	Characteristics of Tensile Strength of U-shaped Carbon Fiber Reinforced Thermoplastic Stranded Wire with Different Curvature			
			499	Ajmal Babu Mahasrankintakam, Siddhartha Ghosh, Sounak Kabasi and Allan Marbaniang	Reliability-Based Design Optimization of Tensile Membrane Structures using Metamodels			
			506	Nikoletta Christidi, Marina Konstantatou and Mariana Popescu	Designing knitted tensile structures via graphic statics and local stiffness variation			
			545	Xinan Xiang, Yuan Feng, Shi-Lin Dong, Tian Qiu, Xudong Zhang, Kuizhen Zhou, Zhong Wei and Hengfei Zhang	Design and research of a tensegrity-type cable dome withrigid roof			
SLOT 9	SESSION 50	(WG 18) Life-Cycle Design and Assessment of Shell and Spatial Structures		COORDINATION: Adrián Moncada		9:00 - 11:00	ROOM E	THURSDAY 30
			438	Mackinley Wang-Xu, Juliana Berglund-Brown, Brandon Clifford and John Ochsendorf	Leveling the playing field: Lifetimes of North American sports stadiums			
			440	Lili Boenigk and John Ochsendorf	Constrained Design with Reused Steel Beams for Low-CarbonBridges			
			554	Matthew Tam, Alex Hofbeck and Alina Schuster	Enhancing LCA Tool Capabilities through model and data management			
			579	Kiley Feickert, Natasha K. Hirt, Katrina Chan and Caitlin T. Mueller	Quantifying the embodied carbon of cantilevered massing typologies in architectural design			
			595	Anouk Fontaine, Oliver Moldow, Rachel Blowes, Keith Lee, Karl-Johan Soerensen and Caitlin Mueller	Pseudo-standard structural wall panels from stud offcuts: Algorithmic design and fabrication experiments			
			602	Robbe Pacquée, Zena Ndiaye, Célia Küpfer, Corentin Fivet and Mario Rinke	Open Up! Algorithmic analysis of structural floor slab adaptations in adaptive reuse			
			605	Ramon Weber and Paul Mayencourt	Structural design as a cost competitive and scalable carbon mitigation strategy			
SLOT 9	SESSION 51	Tension and Membrane Structures and Sustainability Ferrocement		COORDINATION: Stefano Gabriele		9.00 - 11.00	ROOM F	THURSDAY 30
			552	Kristof Crolla, Garvin Goepel, Neil Thomas, Leopoldo Pardo, John I'Anson and Phoebe Hensley	Augmented Reality and Computational Design for Freeform Cement Shell Construction: A Feasibility Study of a Novel Documentation Workflow			
			566	Xavier De Kestelier, Edouard Cabay, Miriam Dall'Igna, Sam Winder, Toby Ronalds and Rob Fuse	Copyright © 2025 by the authors. Published by the International Association for Shell and Spatial Structures (IASS) with permission. New Hope Village – The TimberBlanket			
			603	Víctor Ramírez and Jesús Pérez	Design, construction and analysis of a ferrocement hyperbolic paraboloid shell with curved tubular edges			
COFFEE BREAK						11:00-11:30	LOBBY	
HANGAI PRIZES Presentations:								
Nebyu Haile					LUNA - A Modular Dome Designed by Graphic Statics and Constructed from Discrete Foamed Glass Blocks	11:30 - 11:50		
CLOSING CEREMONY						11:50- 13.00		
Pavilion AWARD CEREMONY								
FAREWELL PARTY						13:00 - 17:00		