



IASS-SLTE 2014 - Program at a Glance

Morning Plenary Sessions (Room 1 – Auditorium)

Day	Monday – Sept. 15	Tuesday – Sept. 16	Wed. – Sept. 17	Thursday – Sept. 18	Friday – Sep. 19
08:00-08:30	Check-in	Check-in	Technical Tour	Brazil World Cup Arenas – 1	Brazil World Cup Arenas – 2
08:30-9:10	Opening Ceremony & Honor Conferrals	Plenary Lecture 3 <i>R. Astudillo-Pastor</i>			
09:10-09:50		Plenary Lecture 4 <i>R. Motro</i>			
09:50-10:30	Plenary Lecture 1 <i>J. Natterer</i>	Plenary Lecture 5 <i>F. Fournier</i>			
10:30-11:00	Coffee-Break	Coffee-Break		Coffee-Break	Coffee-Break
11:00-11:40	Plenary Lecture 2 <i>N.K. Srivastava</i>	Plenary Lecture 6 <i>M. Mimram</i>		Plenary Lecture 8 <i>V. Agopyan</i>	Plenary Lecture 10 <i>I. Llorens</i>
11:40-12:20	IASS Technical Activities Committee Report Tsuboi Award conferrals	Plenary Lecture 7 <i>N. Goldsmith</i>		Plenary Lecture 9 <i>M. Franco</i>	Plenary Lecture 11 <i>S. Pellegrino</i>
12:20-14:00	Lunch	Lunch		Lunch	Lunch

Early Afternoon Parallel Sessions	
10:00-11:00	10:00-11:00
11:00-12:00	11:00-12:00
12:00-13:00	12:00-13:00
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99:00-100:00	99:00-100:00

Day	Monday – Sept. 15								Tuesday – Sept. 16								Thursday – Sept. 18								Friday – Sep. 19
Room	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1
Session Title	WG15-1	WG8-1	Comp-Tools-1	Det-Tech-1	WG17-1	SLTE-1	StrAD-Buc-1	TECH	WG15-2	WG5-1	ConDes-1	StrAD-Cases-2	StrAD-1	SLTE-3	StrAD-Din-1	TECH	WG15-5	StrAD-Cases-1	StrMor-1	ETFE-1	StrAD-3	WG18-2	DetTech-3	TECH	
16:30-18:30	139	72	225	47	53	166	132	1	317	347	189	155	74	339	105	Workshop Technet	169	60	336	134	284	193	161	Wrokshop Forten	
	214	104	288	158	282	299	95	Technet	213	348	86	229	90	343	182		306	37	26	136	215	238	203		
	153	202	298	162	338	312	97		240	258	168	262	146	353	190		302	84	223	235	44	287	55		
	242	204	369	175	147	329	142		143	330	171	356	148	316	305		270	232	106	320	207	342	315		
	331	122	293	280	281	368	18		234	92	184	---	355	---	30		350	237	113	154	121	---	---		
16:00-16:30	Coffee-Break								Coffee-Break								Coffee-Break								Coffee-Break

Late Afternoon Parallel Sessions	
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	Monday – Sept. 15								Tuesday – Sept. 16								Thursday – Sept. 18								Friday – Sep. 19
Room	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1
Session Title	WG15-3	WG8-2	WG18-1	DetTech-2	WG17-2	WG-6-1	StrBuc-2	TECH	WG15-4	WG5-2	Con-Des-3	SFOpt-2	StrAD-2	SLTE-2	StrAD-Din-Sis-1	TECH	WG15-6	WG13-1	StrMor-2	SusDes-1	SFOpt-1	ConDes-2	WG12-1	TECH	IASS Annual General Meeting and Closing Ceremony
16:30-18:30	Intro	<u>291</u>	<u>372</u>	28	333	124	275	Ferrari	177	283	48	115	366	349	98	Workshop Technet	260	327	243	13	35	276	119	Wrokshop Forten	
	163	25	34	77	82	20	290	2	170	59	50	188	42	109	99		87	49	271	29	174	296	199		
	195	62	118	91	307	64	301	Forten	176	180	218	245	71	165	179		172	32	294	185	38	216	236		
	150	63	183	129	332	21	12		266	131	61	277	222	24	186		249	43	334	211	76	328	114		
	220	65	192	233	286	123	130		265	256	107	279	231	54	230		264	100	354	219	149	297	117		
	212	73	---	364	209	128	263		---	370	309	351	---	137	314		45 / 173	145	---	208	133	228			
18:30-19:00	Chill-out time								Chill-out time								Chill-out time								
19:00-22:00	Welcome Reception and Inauguration of Niemeyer's Exhibition <i>Brasilia's National Stadium</i>								IASS and Tensored Meetings								Gala Dinner <i>Don Francisco Restaurant (starting 20:00)</i>								



IASS-SLTE 2014 - Technical Program

Day	Monday – Sept. 15	
Morning Plenary Sessions		
08:00-08:30	Check-in	
08:30-09:50	Opening Ceremony <i>Chairpersons: René Motro, Ruy M.O. Pauletti and Reyolando M.L.R.F. Brasil</i> Conferrals of IASS Honorary Memberships and Torroja Medal <i>Chairpersons: René Motro, Ken'ichi Kawaguchi</i>	
09:50-10:30		Plenary Lecture 1 Julius Natterer, Switzerland Timber is a renewable and sustainable material for space and shell structures
10:30-11:00	Coffee-Break	
11:00-11:40		Plenary Lecture 2 Narendra K. Srivastava, Canada Some Observations from Structures in Nature
11:40-12:20	IASS Technical Activities Committee Report <i>Chairpersons: Carlos Lázaro, René Motro</i> Tsuboi Award conferrals <i>Chairpersons: Ken'ichi Kawaguchi, René Motro</i>	
12:20-14:00	Lunch	

Day	Tuesday – Sept. 16	
Time	Morning Plenary Sessions	
08:00-08:30	Check-in	
Chairpersons	José M. Gáligo, Ronald E. Shaeffer	
08:30-9:10		Plenary Lecture 3 Rafael Astudillo, Spain Reduced scale models as an aid tool for concrete shells and dams: a flash-back to a historical methodology in the Laboratorio Central of CEDEX
09:10-09:50		Plenary Lecture 4 René Motro, France The art of coupling forms and forces in Shell and Spatial Structures
09:50-10:30		Plenary Lecture 5 Françoise Fournier, France Innovative flexible composite materials: a sustainable approach to construction
10:30-11:00	Coffee-Break	
Chairpersons	John Abel, Françoise Fournier	
11:00-11:40		Plenary Lecture 6 Marc Mimram, France Structures and Urbanity
11:40-12:20		Plenary Lecture 7 Nicholas Goldsmith, USA Shape Finding vs Form Finding
12:20-14:00	Lunch	

Day	Tuesday – Sept. 16								
Early Afternoon Parallel Sessions									
Room	1	2	3	4	5	6	7	8	
Session Title	WG15-2	WG5-1	ConDes-1	StrAD-Cases-2	StrAD-1	SLTE-3	StrAD-Din-1	TECH	
14:00-16:00	Introduction	Introduction	156 Research on design of structure for Heixiazhi Island Greenhouse <i>Jun YANG, Yaming LI, Jiachun CUI</i>	125 Design and construction of the beam string structure adjacent to the railroads: structural design of Minato Park Shibaura <i>Nobuhide YAMAGA, Toshifumi NINOMIYA</i>	22 A refined study on the influence of welded hollow spherical joints to single layer latticed dome <i>Lei GU, Maoqiang DING, Xueyi FU, Xianchuan CHEN</i>	167 Enseñando a diseñar y construir tenso-estructuras <i>Juan Gerardo OLIVA SALINAS, Marcos Javier ONTIVEROS HERNÁNDEZ</i>	102 Virtual work sensitivity research of material distribution to structural period <i>Xin ZHAO, Yaomin DONG, Tianyi YU</i>	Workshop	
	317 State on the art of computational tools for conceptual structural design <i>Anke ROLVINK, Caitlin MUELLER, Jeroen COENDERS</i>	347 <i>DISASTER SURVIVABILITY OF THIN-SHELL CONCRETE DOME STRUCTURES: EXPERIENCE AND PRACTICE</i> <i>Andrew J SOUTH; Chris ZWEIFEL</i>	189 Iron brick construction system <i>Vitor LOTUFO</i>	155 Design of the Main Stand of the Todoroki Athletics Stadium <i>Osamu HOSOZAWA, Kohei SHIMAMURA, Yumi SAKAGUCHI</i>	74 Timber structures for sport installations <i>Evgenii A. CHAIKIN, Dmitrii A. LOKTEV, Ivan S. INZHUTOVA</i>	339 3 casos de estructuras tensadas como estrategia de optimización estructural <i>Felipe ALVARADO</i>	105 The vibration control research of a spatial grid structure <i>Siyu ZHU, Qilin ZHANG , Xiaqun LUO</i>		
	213 Design of a shading screen inspired by Persian geometric patterns: an integrated structural and daylighting performance evaluation <i>Niloufar EMAMI, Anahita KHODADADI, Peter VON BUELOW</i>	348 <i>CONCRETE DOME STRUCTURES AND EXTREME WIND LOADS: THE DESIGN OF COMMUNITY SHELTERS</i> <i>Chris ZWEIFEL; Andrew J SOUTH</i>	86 Research on IFC based software for spatial structural model transformation <i>Xuan WANG, Qilin ZHANG</i>	229 Structural design of Suita Stadium <i>Masahito OHNO, Hisato OKUDE, Hirokazu NOZAWA, Takashi KIHARA, Eiji FUJII, Kazuo OHTAKE, Hideyuki TANAKA</i>	90 Experimental research on a steel transfer truss joint in zone B of Hangzhou Alipay Building <i>Zhaoyang LI, Bin YANG, Caiqin LI, Jing YUAN</i>	343 Construcción experimental de una cubierta retráctil ligera <i>Carlos César Morales GUZMÁN</i>	182 Dynamics of structures of clusters of tethered satellites <i>Reyolando M.L.R.F. BRASIL Victor FALLARA, Ruy M.O. PAULETTI, José M. BALTHAZAR</i>		
	240 Performance oriented generative design of structural double skin facades inspired by cell morphologies <i>Omid OLIYAN TORGHABEHI, Peter VON BUELOW</i>	258 Structural design of a church of free form - ex-ample of earthquake resistant design of reinforced concrete shell in Japan <i>Katsuo NAKATA, Takashi TAKAMIZAWA, Atsushi MUTOH, Shoji NAKAZAWA, Shiro KATO</i>	168 Effect of wind ripple form to lattice spatial structure with geometry from sand dune <i>Shuichi ASAYAMA, Toshifumi MAE, Kiyonori TAKAHASHI</i>	262 Design of Yamato Forum at Haneda Chronogate <i>Takashi FUKUSHIMA, Ryuichi TERADA, Yuji YAMANO</i>	146 The geometry-material nonlinear analysis of mechanical performance on the rectangular steel silo <i>Shaole YU, Lianping YANG, Qilin ZHANG, Ke LEI</i>	353 STRING TENS: Sistema Polidérido – Tenso Bifurcado <i>Joan JIMENEZ, Geraldine CARRERA, Christian CUBA, Kristel HUARAZ, Jhonatan SANCHEZ, Lizet VELAZQUES</i>	190 Failure modes of single-layer reticulated dome subjected to interior blast loading <i>Feng FAN, Jialu MA, Xudong ZHI</i>		
	143 Interactive distributed optimization for multidisciplinary design <i>Dion JANSEN, Anke ROLVINK, Jeroen COENDERS, Mattias SCHEVENELS</i>	330 Seismic behavior of an earth-formed / earth-covered concrete shell during the 2003 San Simeon, California earthquake <i>Satwant RIHAL, Ali ROUFEGARINEJAD, Mason WALTERS</i>	171 Architecture aiming to construct a healthy structure: Bursa Greengrocers and Fishmongers Wholesale Market <i>Tuncer CAKMAKLI</i>	356 Inner force monitoring system of the steel structure of Ningbo Railway Station and its data analysis <i>Tengyuan MA, Bin YANG, Qilin ZHANG, Qian FANG ---</i>	148 The influence of different stiffening ribs on mechanical behaviors of the special-shaped steel coal scuttle <i>Shaoe YU, Lianping YANG, Ke LEI</i>	316 “Los colores de mi tierra” <i>Luisa Fernanda Alvizures GÁLVEZ</i>	305 Dynamic behavior and redundancy of adaptive truss structures <i>Patrick TEUFFEL, Arjan HABRAKEN</i>		
	234 Additive manufacturing of structural prototypes for conceptual design <i>Caitlin T. MUELLER, Ali IRANA, Benjamin E. JENETT</i>	92 Design and research of 67m-span concrete shell as supporting structure <i>Honglei WU, Jiemin DING, Wenyu QUAN</i>	184 A concept for freeform shell structures composed of doubly-curved multilayered panels <i>Thorsten POFAHL, Giovanni DELLA PUPPA, Martin TRAUTZ, David BAILLY, Gerhardt HIRT</i>	---	355 The design of hybrid structure with timber and steel <i>Noriaki YAMADA</i>	---	30 Buckling and vibration analysis of conoidal shells <i>Lilian DE VASCONCELLOS CAVALCANTI, Paulo BATISTA GONÇALVES</i>		
	16:00-16:30	Coffee-Break							

Day	Tuesday – Sept. 16							
Late Afternoon Parallel Sessions								
Room	1	2	3	4	5	6	7	8
Session Title	WG15-4	WG5-2	Con-Des-3	ShFindOpt-2	StrAD-2	SLTE-2	StrAD-Din-Sism-1	TECH
16:30-18:30	177 Prototype of an ultra-thin concrete, vaulted floor system <i>David LÓPEZ LÓPEZ, Diederik VEENENDAAL, Masoud AKBARZADEH, Philippe BLOCK</i>	283 Oridome: Construction of a dome by folding <i>Jan Dirk VAN DER WOERD, Rostislav CHUDOKA, Josef HEGGER, Christiane BONGARDT</i>	48 Performance Aided Design: tradition and development of tectonic design process <i>Dario PARIGI</i>	115 Flake System, connectorless assembly for curved surface structures with flat sheet materials <i>Javier MARTIN, Juan Pablo UGARTE</i>	366 Reinforcing and correcting eccentricity in staking end-flattened connection to increase the strength of steel space trusses <i>Luciano M. BEZERRA, Cleirton S. FREITAS, William M. TAYLOR</i>	349 Textile architecture: Membrane structures for new architecture expression, between atopic and ethics <i>Aldo CAPASSO</i>	98 Research on analysis of large space structure under multi-support seismic excitation <i>Feng LIU, JiHong QIAN, PengFei ZHAO</i>	Workshop

Day	Wednesday – Sept. 17					
	Technical Tour Summary (Preliminary) Due to scheduling constraints, there are some differences on the program of each group. Buses will leave from the lobby of Hotel Meliá 21 at 08:30. Bring your sunglasses and sunscreens -- weather is very shiny and dry in Brasília, during this period of the year!					
Time	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
08:30 – 08:45	Commuting	Commuting	Commuting	Commuting	Commuting	Commuting
08:45 – 09:45						
	GENERAL REPUBLIC'S ATTORNEY BUILDING	COSTA E SILVA BRIDGE	CATHEDRAL	TV TOWER	ESTADIO NACIONAL	PONTE JK
09:45 – 10:00	Commuting	Commuting	Commuting	Commuting	Commuting	Commuting
10:00 – 11:00	JK BRIDGE	GENERAL REPUBLIC'S ATTORNEY BUILDING	NATIONAL STADIUM	NATIONAL STADIUM	COSTA E SILVA BRIDGE	CATHEDRAL
11:00 – 11:20	Commuting	Commuting	Commuting	Commuting	Commuting	Commuting
11:20 – 12:30	NATIONAL STADIUM	JK BRIDGE	GENERAL REPUBLIC'S ATTORNEY BUILDING	COSTA E SILVA BRIDGE	CATHEDRAL	TV TOWER
12:30 – 12:45	Commuting	Commuting	Commuting	Commuting	Commuting	Commuting
12:45 – 13:45	CATHEDRAL	NATIONAL STADIUM	JK BRIDGE	GENERAL REPUBLIC'S ATTORNEY BUILDING	TV TOWER	NATIONAL STADIUM
13:45 – 14:00	Commuting	Commuting	Commuting	Commuting	Commuting	Commuting
14:00-15:40	Late Lunch					
15:40-23:00	Free-time and Meetings					

Day	Thursday, Sept. 18	
Morning Plenary Sessions		
	<u>Brazil World Cup Arenas – 1</u>	
Chairpersons:	Ruy Marcelo O. Pauletti, Marc Mimram	
08:00-10:30		Maurício Santos Estádio Beira Rio – Porto Alegre
		Ralf Amann Arena da Amazônia – Manaus
		Marcelo Ungaretti Arena de São Paulo – São Paulo
		Bruno Campos and Antônio Sérgio Estádio Mineirão – Belo Horizonte
		Daniel Fernandes Estádio Maracanã – Rio de Janeiro
		Daniel Fernandes and Knut Stockhusen Arena Pernambuco – Recife
10:30-11:00	Coffee-Break	
Chairpersons	Reyolando M.L.R.F. Brasil, Qilin Zhang	
11:00-11:40		Plenary Lecture 8 Vahan Agopyan, Brazil The challenge of sustainability for Building and Civil Engineering’
11:40-12:20		Plenary Lecture 9 Mario Franco, Brazil Staged Construction and Long-Term Deformation of Tall Buildings
12:20-14:00	Lunch	

Day	Thursday, Sept. 18							
Early Afternoon Parallel Sessions								
Room	1	2	3	4	5	6	7	8
Session Title	WG15-5	StrAD-Cases-1	StrMor-1	ETFE-1	StrAD-3	WG18-2	DetTech-3	TECH
14:00-16:00	Intro	41 Design and Analysis of a single-double layer mixed latticed roof structure of Nanjing Lukou International Airport Terminal 2 <i>Jian ZHOU, Hongjun WANG</i>	23 Morphology of Neolithic carved stone balls <i>Tibor TARNAI, András LENGYEL</i>	89 A study on the stretch fabrication of tensile membrane structures using ETFE films <i>EuSeok JEONG, Masaya KAWABATA</i>	273 Nonlinear numerical simulation of bolted ring flanges in wind turbine towers <i>Ilias D THANASOULAS, Konstantina G KOULATSOU, Charis J GANTES</i>	227 Environmentally compatible structures: a case for shell and spatial structures <i>Petr VEGH</i>	52 Super-light pearl-chain arch vaults <i>Kristian D HERTZ, Philip S HALDING</i>	Wrokshop Forten
	169 Non-linear analysis of deployable structures comprised of optimized universal scissor components <i>Lara ALEGRIA MIRA, Ashley P. THRALL, Niels DE TEMMERMAN</i>	60 Structure design of the Central Entrance Hall in Tianjin National Convention & Exhibition Center Project <i>Ming MA, Pengfei ZHAOA, Jihong QIAN, Feng LIU</i>	336 Half a century with the Space Structures Research Centre of the University of Surrey <i>S Alireza BEHNEJAD, Gerard A R PARKE</i>	134 TensileTensile property of ETFE foil after viscoplastic-forming process <i>Minger WU, Yintang Li, Weitao XU</i>	284 Numerical analysis of mean wind pressure on large span free-form surface structure <i>Ganping SHU, Lei DONG, Dajie WEI, Jinyu LUA, Ran LI</i>	193 Carbon footprint based sustainable structural design of super tall buildings <i>Xin ZHAO, Shuo FANG</i>	161 High performance contact materials for load bearing glass structures <i>Jan EBERT, Bernhard WELLER, Stefan REICH</i>	
	306 A classification of singly curved deployable scissor grids <i>Kelvin ROOVERS, Niels DE TEMMERMAN</i>	37 Structural system selection and structural design for a giant ellipsoid large-span steel roof <i>Zheng ZHANG, Jiemín DING, Songlin WANG</i>	26 Computational generation of free-form shells based on the inverse hanging experiment <i>Qingpeng Li, Yue WU, Shizhao SHEN</i>	136 Biaxial creep tests of ETFE foil <i>Yintang Li, Minger WU, Hao WANG</i>	215 A simplified model for large diameter monopile foundation of wind tower in tidal homogeneous clay <i>Renle MA, Mingyi ZHANG, Shuiying HUANG</i>	238 Paper relief architecture <i>Jerzy F. ĄTKA</i>	203 Long-term test on timber trusses <i>Jaroslav SANDANUS, Miloš SLIVANSKY, Kristian SOGEL</i>	
	302 Digital modelling of deployable structures based on curved-line folding <i>Aline VERGAUWEN, Niels DE TEMMERMAN, Lars DE LAET</i>	84 Optimization of the structure of Shenzhen Contemporary Art & City Planning Museum <i>Weibiao YANG, Ruiwen YUAA, Zhongjin YUAN, Lei LU, Zhenchao GONG</i>	223 Design of deployable structure for dome type emergency shelter <i>Daniel S-H LEE, Olga Popovic LARSEN, Seung-Deog KIM</i>	235 Experimental study of ETFE cushion-inflated form-developing through flat-patterning <i>Wujun CHEN, Bing ZHAO, Hao SONG, Jing CAI</i>	44 Analysis of adaptive cable dome <i>Stanislav KMET, Marek MOJDIS</i>	287 Metaheuristics for a tectonic development of hospital design footprints <i>Malene Kirstine HOLST, Poul Henning KIRKEGAARD</i>	55 Difference between drawings and assembled models in curved surface combined with flat plates and bolts <i>Shigehiro MOROOKA, Keisukea NOMURA</i>	
	270 Multi-criteria optimization of a barrel vault structure for emergency relief <i>Aushim KOUMAR, Tine TYSMANS, Niels DE TEMMERMAN, Rajan FILOMENO COELHO, Lara ALEGRIA MIRA</i>	232 Troja Bridge in Prague - steel structure and prestressed network of tendons <i>Vladimir JANATA, Dalibor GREGOR</i>	106 Mock-up test of deployable scissor structures based on geodesic grid using the slot members <i>JiSub LIM, SangSoon CHOI, EuSeok JEONG, SeungDeog KIM</i>	320 Thermal environment of an atrium enclosed by an ethylene-tetra-fluoro-ethylene (ETFE) foil cushion roof <i>Sabrina AFRIN, John CHILTON, Benson LAU</i>	207 Calculation formula for stress of a slab subjected to uniform load with geometrical initial imperfection <i>Masafumi TANAKA, Ryoichi SHIBATA</i>	342 Interrelationship between Architecture, Structures, Fabrication and Construction using sustainable materials <i>Alfonso PAPPALARDO JR., Said JALALI, Felipe José SILVA, Roni M. SCHMELING</i>	315 Design, analysis and fabrication of expressive, efficient shell structures <i>Alicia N NAHMAD VAZQUEZ, Shajay BHOOSHAN, Asbjorn SONDERGAARD, Chikara INAMURA, Joshua ZABEL, Mustafa EL-SAYED</i>	
	350 Shape optimization of an origami-inspired deployable shelter for minimum deflections <i>Chad P. QUAGLIA, Ashley P. THRALL</i>	237 Troja Bridge in Prague – global analysis and construction phases <i>Dalibor GREGOR, Vladimir JANATA, Ladislav ŠAŠEK, Petr NEHASIL, Robert BROŽ</i>	113 Experimental Workshop in Unconventional Structures: Deployable & Tree-Like Structures SMiA - Training and Research at Barcelona Tech <i>Omar Fabrisio AVELLANEDA, Natalia Paola TORRES, Diana PEÑA, Ramon SASTRE</i>	154 Parametric analysis of triangular ETFE cushions <i>Jiachun CUI, Lianping YANG, Yanzhen WU</i>	121 Damage control study for space truss structures using damping devices made of smart metals <i>X.Q. LUO, Q. LIU, B. JIA, Q.L. ZHANG</i>	---	---	
16:00-16:30	Coffee-Break							

Day	Friday, Sept. 19	
Morning Plenary Sessions		
	<u>Brazil World Cup Arenas – 2</u>	
Chairpersons:	Maruska Lima de Souza Holanda, Pedro Afonso O. Almeida	
08:00-10:30		Marc Duwe Arena Fonte Nova – Salvador
		Danillo Carvalho Arena das Dunas – Natal
		Eduardo Castro Mello and Knut Stockhusen Estádio Nacional de Brasília
		Ronaldo Marcatto Estádio Castelão - Fortaleza
		Sérgio Coelho Arena Pantanal – Cuiabá
		Carlos Arcos Arena da Baixada – Curitiba
10:30-11:00	Coffee-Break	
Chairpersons	Rafael Astudillo, Narendra Srivastava	
11:00-11:40		Plenary Lecture 10 Josep Ignasi de Llorens Duran, Spain Recoverable tension anchors for structural membranes
11:40-12:20		Plenary Lecture 11 Sergio Pellegrino, USA Buckling of Cylindrical Shells: Avoidance of Sensitivity to Imperfections through Shape Optimizatio
12:20-14:00	Lunch	

Day	Friday, Sept. 19
Afternoon Parallel Sessions	
Hangai Prize Ceremony	
Chairpersons:	<i>Ken'ichi Kawaguchi, René Motro</i>
14:00-15:20	Benoit DESCAMPS, Université libre de Bruxelles Form finding and optimization: getting the best of both worlds to design lightweight structures <i>Benoît DESCAMPS, Rajan FILOMENO COELHO (paper 68)</i> Georgia MARGARITI, National Technical University of Athens Analytical estimation of critical buckling load for guyed towers <i>Georgia MARGARITI, Charis J GANTES (paper 295)</i> Renjie LIU, Beijing University of Technology. The formulas derivation of node coordinates of Annular Crossed Cable-truss Structure in pre-stress state <i>Renjie LIU, Suduo XUE, Xiongyan LI (paper 261)</i> Zach Seibold, Harvard University Graduate School of Design Affective Thickness: Robotic Fabrication of Components for Ceramic Shell Structures <i>Zach SEIBOLD, Malika SINGH, Ling-Li TSENG, Yingyi WANG (paper 319)</i>
15:20-15:40	SLTE Student's Contest Ceremony <i>Chairpersons: Ruy Marcelo de Oliveira Pauletti, Roxana Garrido</i>
15:40-16:00	Coffee-Break (20 min)
16:00-18:00	IASS Annual General Meeting and Closing Ceremony <i>Chairpersons: René Motro, John Abel</i>

