footbridge

adrid 2022

creating experience

07 / 09.09.2022

Organization:

ACHE
ASOCIACIÓN ESPAÑOLA
DE INGENIERÍA ESTRUCTURAL

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INTRODUCTION

Footbridges are perhaps the constructions where the interaction of the structure with the user is most important. Whether they are built in cities or to bridge an obstacle in the countryside, footbridges are visible from many different angles. The user can also physically touch the work and feel a more or less pleasurable experience when inside or observing it from the outside.

The design of the work implies the harmonious conjunction of structure, form and landscape is fundamental to that experience. The technical part of the design involves ensuring the short- and long-term resistance of the structure as well as the user's comfort in the face of possible vibrations, a common problem in this type of construction. But this comfort does not only depend on mechanical or structural issues. An excessively narrow footbridge over a canyon can provoke rejection when the pedestrian tries to cross safely and quickly, and yet this sensation of emptiness can be intentional when the crossing of the footbridge is done simply for adventure. As the reader can understand, each work is original, and the experience sought by the user is also unique.

Madrid Footbridge Conference 2022 is the continuation of a long set of Conferences that started in Paris in 2002, followed by cities as Porto, Venice, Wroclaw, London and Berlin.

The present edition tries to follow the aim of the Berlin's 2017 conference. In that case the moto of the congress was 'tell us a story'; now we want to know more about the feeling and experience of users, owners, designers and constructors.

In Madrid we would like to create an atmosphere where all of us can share our positives and negatives **experiences** in competitions, during designing or in construction. We would like also to open the conference to public and the Administration to discuss and confront the way of perceiving footbridges and their **experiences** as users or owners.

For that we prepared the following themes:

- Footbridge competitions: experiences.
- Footbridges as an important part of a system: the context as an experience.
- Bringing life to existing bridges: Experience on bridge transformations into footbridges or cyclist paths.
- Extreme experiences: long span suspension bridges in remote places.
- User experience on the bridge: staying, marketing, feeling vibrations, etc.
- Learning from experience: how overcoming to failure in procurement, designing, etc.
- Experiences of the future: experimentations.
- Sharing your experience: bringing footbridges for human survival. Footbridges in underdeveloped areas.

As usual in these conferences, the points of view are manifold. Engineers, architects, town planners and landscape architects present their views on these experiences. In addition, the international character of the conference will allow to confront the different visions which will undoubtedly enrich all the participants.

José Romo
September 2022

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ORGANIZING COMMITTEE

Chair: Romo, José - Spain

Bentley, Lisa - UK
Bernardo, Héctor - Spain
Conzett, Jürg - Switzerland
Domouso, Francisco - Spain
Janberg, Nicolas - Germany
Regúlez, Borja - Spain
Romo, Rocío - Spain
Sánchez, José - UK
Todisco, Leonardo - Spain

SCIENTIFIC COMMITTEE

Chair: Romo, José - Spain
Co-chair: Conzett, Jürg - Switzerland

Anderson, John - South Africa
Beade, Héctor - UK
Bednarski, Cezary - UK
Bernabeu, Jorge - Spain
Bernardo, Héctor - Spain
Biliszczuk, Jan - Poland
Bronzini, Gianfranco - Switzerland
Brownjohn, James - UK
Domouso, Francisco – Spain
Ernst, Christian - USA
Ferraz, Ricardo - Hong Kong
Firth, Ian - UK
Font, Xavier - Spain
Goldack, Arndt - Germany
Guisasola, Mario - Spain
Hawryszkow, Pawel - Poland
Herr M., Christiane - China
Jensen, Poul Ove - Denmark
Jorquera, Juan José - Spain
Kasuga, Akio - Japan
Kawaguchi, Ken'Ichi - Japan
Knight, Martin - UK
Madrazo, Fernando - UK
Martin de la Concha Renedo, Carlos - Spain
McNeil, John - New Zealand
Montens, Serge - France
Muñoz, Iván - Spain
Pagès, Yves - France
Patrón Solares, Alberto - Mexico
Payá, Ignacio - Spain
Regulez, Borja - Spain
Rosales, Miguel - USA
Schlaich, Mike - Germany
Siviero, Enzo - Italy
Sobrino, Juan - Canadá
Todisco, Leonardo - Spain
Van den Broeck, Peter - Belgium

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KEYNOTE SPEAKERS

JÜRG CONZETT

Jürg Conzett, citizen of Schiers (Switzerland), born in 1956 studied civil engineering at EPF Lausanne and ETH Zürich. After receiving his diploma in 1980 he worked for several years in the office of architect Peter Zumthor. In 1988, he started his own office as a structural engineer. Today, the firm Conzett Bronzini Partner in Chur (Grisons) investigates existing constructions and designs new bridges and buildings, often in collaboration with architects.

MARTIN KNIGHT

Martin is one of the leading UK architects specialising in the design of bridges and transport corridor infrastructure and is a Fellow of the RIBA and the Institution of Civil Engineers and an Honorary Fellow of IStructE. He champions high-quality infrastructure design that creates social value and addresses the Climate and Biodiversity Emergency.

He founded international bridge designers Knight Architects in 2006 and his award-winning practice has completed more than fifty bridges in the UK and internationally. Their approach to design has been hailed as exemplary by bodies including the UK National Infrastructure Commission and the Design Council in the UK and Baukultur Bundesstiftung in Germany.

JESPER HENRIKSEN

For 20 years, Architect and Partner at Dissing+Weitling, he has focused on bridge design and mobility.

Jesper's international experience is grounded in a commitment to creating beautiful infrastructure – iconic landmarks that define cities, fulfil the needs of their people, and take the natural environment into consideration.

He manages many of the Dissing+Weitling's high-profile mobility project. He was part of the team creating the iconic award winner The Bicycle Snake in Copenhagen, the landmark for public transport in Greater Copenhagen Køge Nord Station and the winner of the Liveable Cities category in Danish Design Award 2019: Xiamen Bicycle Skyway in China. This year, Jesper was awarded Danish Bridge and Tunnel Award by IABSE Danmark and Dansk Brodag for stimulating and developing the professional environment within bridge and tunnel construction in Denmark.

ANDREAS KEIL

Keil, Andreas, Dipl. Ing.; 1979-1985 Study of Civil Engineering at the University of Stuttgart, Germany; since 1985 engineer at schlaich bergermann partner; since 1994 partner; various awards, including Ingenieurpreis des Deutschen Stahlbaues 2019, 2018; Deutscher Brückenbaupreis 2018, 2014; Hugo-Häring-Preis 2003.

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LAURENT NEY

CEO of Ney & Partners – (Leading Architect & Structural Engineer)

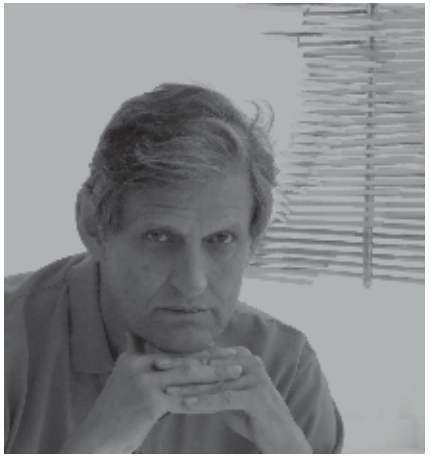
Laurent Ney (°1964, Thionville) is a structural engineer and architect trained in Belgium and Germany. Since 1995 he has been a lecturer on structural engineering in several Belgian Universities. In 1996 he founded the engineering firm Ney & Partners in Brussels and Luxemburg. Since 2012 satellites offices were opened in Tokyo, Hanoi, Bordeaux and Delft. Ney's approach is characterized by research based design: optimization and form finding.

Laurent Ney combines a practical and theoretical knowledge. He published several books on his design approach. He is a regular key note speaker at international engineering conferences as IABSE, IASS, Footbridge. Many bridge designs of Ney & Partners were awarded in Belgium and abroad because of their innovations.

IGNACIO PAYÁ

Professor at the Universitat Politècnica de València (UPV) in Spain, where he teaches several courses related to conceptual design, philosophy of structures, construction history and building design.

As a visiting professor, Ignacio has taught and conducted research with Prof. M. Schlaich at TU Berlin (nine months) and with Prof. M. Garlock at Princeton University (25 months). At Princeton, he was a Visiting Professor for Distinguished Teaching and developed the course "The Art of Spanish Bridge Design". Ignacio has received several awards such as the UPV Outstanding PhD Award and the UPV Excellence in Teaching Award (2009). He was also named best civil engineering student (UPV class of 1996). Ignacio is also a founding partner of the spin-off company Calsens devoted to the monitoring of structures and processes, and created in 2010 the Facebook group "El Club de los Locos del Arte Estructural" ("Crazy for Structural Art Club").



FERNANDO PORRAS

Architect and Master's Degree in Architecture. He has been director of the magazines "Arquitectura" of the Colegio Oficial de Arquitectos de Madrid (1991-1993) and "BAU" of the Colegios de Cantabria, Castilla León and Castilla la Mancha (1994-2002). He is a lecturer in Architectural Projects at the Toledo School of Architecture, University of Castilla la Mancha.

He has received several national and international awards for his built work such as the FAD for Architecture (2012), the FAD for City and Landscape (2012), the Veronica Rudge Green of Harvard University (2015), the CICA award of the Buenos Aires Biennial (2011), the Green Good Design award of the Chicago Athaeneum, the FIDIC award (2014), the Albert Serratosa award (2019).

He is co-author of the Madrid Río Project, the remodelling of the Plaza de España (Madrid), the development of the area around the Santiago Bernabéu stadium (Madrid), the Museo de los Poblados de Colonization of Valdelacalzada (Badajoz) or the 7 greeen belt Bridges landscape in Lingang City (Shanghai).

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CONDENSED PROGRAMME

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Tuesday 06/09/2022					
	16:30	-	19:30	Workshop Design (Room 2)	
Wednesday 07/09/2022				**ROOM A**	**ROOM B**
	8:15	-	9:00	Registration	
	9:00	-	9:30	Opening session	Opening session
	9:30	-	10:00	Keynote	**Jürg Conzett.** *Bridge competitions, some personal views and experiences*
	10:00	-	10:30	Keynote	**Andreas Keil.** *Changing Cities*
	10:30	-	11:00	Coffee break	
	11:00	-	13:30	Technical sessions	Topic: Context as experience / Topic: Competitions
	13:30	-	14:30	Lunch break	
	14:30	-	16:00	Technical sessions	Topic: Context as experience / Topic: Experimentation
	16:00	-	16:30	Coffee break	
	16:30	-	18:30	Technical sessions	Topic: Context as experience / Topic: Existing bridges
	18:30	-	19:10	Footbridge Awards	
	19:10	-	19:15	ACHE Medal to Jiri Strasky	
	19:15	-	21:00	Conference Dinner (extra booking - sala rectangular)	
Thursday 08/09/2022				**ROOM A**	**ROOM B**
	9:00	-	9:30	Keynote	**Martin Knight.** *How Dare You?*
	9:30	-	10:00	Keynote	**Ignacio Payá.** *Engineering, art and politics in Spanish footbridges. Experiences, interactions and lessons learned*
	10:00	-	10:30	Keynote	**Jesper Henriksen.** *Connectivity*
	10:30	-	11:00	Coffee break	
	11:00	-	13:30	Technical sessions	Topic: Context as experience / Topic: Experimentation
	13:30	-	14:30	Lunch break	
	14:30	-	16:00	Technical sessions	Topic: Context as experience / Topic: Dynamics
	16:00	-	16:30	Coffee break	
	16:30	-	18:00	Technical sessions	Topic: Learning from experience / Topic: Remote places
	18:00	-	18:15	Special session: Bridges to Prosperity	Nivi Sharma and Nicola Turrini
	18:15	-	20:15	Presentation of workshop designs	Presentation of workshop designs
Friday 09/09/2022				**ROOM A**	**ROOM B**
	9:00	-	9:30	Keynote	**Laurent Ney.** *Where reality meets legend - Building in historical sites*
	9:30	-	10:00	Keynote	**Fernando Porras.** *Footbridges over the Manzanares river. A system to heal a secular wound*
	10:00	-	10:30	Coffee break	
	10:30	-	12:15	Technical sessions	Topic: Context as experience / Topic: Dynamics and Context as experience
	12:15	-	13:00	Round Table (free entrance)	**José Antonio Fernández Ordóñez: Engineering and Art**
	13:00	-	13:30	Closing ceremony	Closing ceremony

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TECHNICAL SESSION PROGRAMME

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WEDNESDAY 07/09/2022 11:00 - 13:30

ROOM A

Context as experience. Session chair: Cezary Bednarski

1	Javier Oliva and Arturo Ruiz de Villa	PEDESTRIAN/BIKE BRIDGE OVER MANZANARES RIVER IN MADRID
2	Dan Fitzwilliam	ATWATER VILLAGE CABLE STAYED EQUESTRIAN BRIDGE
3	Andreas Keil, Sebastian Linden, Christiane Sander and Julia Schuler	PIUS-STEG IN INGOLSTADT. AN EXAMPLE FOR HOLISTIC DESIGN
4	Christiane Sander, Tilo Behrmann and Sven Plieninger	A FAMILY OF BRIDGES IN RIEDLINGEN
5	James Marks	OPENING THE CAGE - FOOTBRIDGE OVER THE MYSTIC RIVER
6	Michel Schreinemachers and Wiebe Stric	FORM FOLLOWS EXPERIENCE: NOTES ON THE FUNCTIONALITY OF FOOTBRIDGES
7	John McNeil, Armin Voelske and Rowland Burke	WESTGATE TUNNEL, MELBOURNE - FAMILY OF FOOTBRIDGES FOR A TUNNEL PROJECT
8	Schaun Valdovinos, Chelene Wong, Don Helling and Ken Wilson	CONNECTING A REGION: FOOTHILLS TRAIL WHITE RIVER BRIDGE
9	Ueli Brauen	PRESTRESSED ULTRA-HIGH-PERFORMANCE FIBRE-REINFORCED CONCRETE FOOTBRIDGE
10	Ueli Brauen	WOODEN FOOTBRIDGE IN A NATIONAL HERITAGE SITE
11	Jorge Cascales Fernandez, Ricardo Rico Rubio, Sergio Couto Wörner and Pablo Grandío Noche	MARINEDA FOOTBRIDGE IN A CORUÑA (SPAIN)

ROOM B

Competitions. Session chair: Jürg Conzett

1	Marcos Sanchez, Robert Ryan and Simon Roberts	MARY ELMES, DESIGN AND CONSTRUCTION OF AN URBAN PEDESTRIAN BRIDGE OVER RIVER LEE IN CORK CITY CENTRE. FROM COMPETITION TO OPENING
2	Rok Mlakar and Viktor Markelj	THE OŁOWIANKA BASCULE FOOTBRIDGE IN GDANSK – A BRIDGE THAT MAKES THE DIFFERENCE
3	Boaz Yariv, Anthony Dewar and Des Mairs	NEW DESIGNS OF RAILWAY STATION FOOTBRIDGES
4	Steve Line and Eric Birkhauser	APPLYING AGILE DESIGN METHODOLOGIES FOR DESIGN COMPETITONS; EXPERIENCE ON THE INWMG FOOTBRIDGE COMPETITION
5	María Del Mar Goberna and Gonzalo Goberna	CONTEST FOR A BRIDGE FOR PEDESTRIANS AND BYCICLES ACROSS THE MINHO RIVER
6	Jan Biliszczuk, Marco Teichgraeber, and Robert Toczkiewicz	DESIGN COMPETITIONS OF FOOTBRIDGES
7	Yves Pages, Quentin Berton, Klaas de Rycke, Niccolo Baldassini, Narjis Lemrini, Ana Marti Baron and Xavier Veilhan	NYON FOOTBRIDGES COMPETITION, A TWIN EXPERIENCE
8	Isaak Rokach, Devan Levin and Nir Chen	YEHUDIT BRIDGE
9	Etienne Bouleau, Laurent Savioz and Etienne Bouleau	A FULL WEATHERING STEEL FOOTBRIDGE WITH OPTIMIZED LATTICE TRUSS PARAPETS
10	Vincent Servais and Christophe Peigneux	SMALL FOOTBRIDGES : 2 CONTEXTS, 2 RESPONSES
11	Bart Bols and Laurent Ney	PARTICIPATION IN DESIGN COMPETITIONS

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WEDNESDAY 07/09/2022 14:30 - 16:00

ROOM A

Context as experience. Session chair: Nicolas Sterling

1	Dan Fitzwilliam	WALK THROUGH THE EYE OF A NEEDLE
2	Ana Sanchez and Laurent Ney	FOOTBRIDGES EMBRACED BY THEIR USERS
3	Oliver Stross, Ian Firth, Martin Knight and Bartlomiej Halaczek	AN UNUSUAL 3-WAY FOOTBRIDGE - CONCEPT AND DELIVERY
4	Jan Biliszczuk, Jerzy Onysyk, Robert Toczkiewicz and Paweł Wątroba	DESIGN OF THE THREE NATIONS FOOTBRIDGE OVER THE NYSA ŁUŻYCKA RIVER
5	Enrique Goberna, Knut Stockhusen, Daniel Gebreiter and Matteo Dini	FOOTBRIDGES IN MEYDAN ONE MALL IN DUBAI, UAE
6	Edwin Thie	FOOTBRIDGE - CIRKELBRUG. A PLAYFUL WEATHERING STEEL FOOTBRIDGE.
7	Birger Opgård, Gaute Mo, Fernando Ibáñez Climent and Altea Cámara Aguilera	STOVNER TOWER ACCESSIBLE PEDESTRIAN WALKWAY TO THE FIORD VIEWPOINT

ROOM B

Experimentation. Session chair: Nicolas Janberg

1	David Knight, Stuart Chambers and Mike Tonkin	THE DINOSAUR BRIDGE – INNOVATION IN STRUCTURAL FORM & FABRICATION
2	Peter Nugent	NEW WORKFLOWS FOR THE EFFICIENT DESIGN AND CONSTRUCTION OF ARCHITECTURAL FOOTBRIDGES
3	Maria Del Mar Corral and Leonardo Todisco	CAN FOOTBRIDGES BE SMART STRUCTURES?
4	Carlos Lázaro, Carmen Castro-Bugallo, Juan Navarro-Gregori and Pedro Serna	EXPLORING CONCEPTS FOR UHPFRC BENDING-ACTIVE FOOTBRIDGES
5	Mario Guisasola	STANDARDIZATION OF THREE EFFICIENT FOOTBRIDGES: VON MISES, MONOCONTENTIO AND BICONTENTIO PROTOTYPES
6	Juan Sobrino	"SUSTAINABILITY AND VISUAL CONSIDERATIONS FOR FOOTBRIDGES DESIGNED WITH STAINLESS STEEL
7	Martin Knight	FLOW BRIDGE – A USER ORIENTED FRP MODULAR FOOTBRIDGE
8	Julie Devènes, Jan Brütting, Maléna Bastien-Masse, , Célia Küpfer and Corentin Fivet	RE:CRETE - A FOOTBRIDGE MADE OF REUSED REINFORCED CONCRETE BLOCKS

WEDNESDAY 07/09/2022 16:30 - 18:30

ROOM A

Context as experience. Session chair: Enrique Goberna

1	Bart Bols Matthieu Mallié and Laurent Ney	TINTAGEL FOOTBRIDGE - VOID FOR IMAGINATION
2	John Anderson and Maja Wilson	THE MANY INPUTS TO CREATING A SINGLE MOVING FORM, THE V&A FOOTBRIDGE
3	Helena Russell and Jonathan Faragher	THE MOTORWAY FOOTBRIDGE AS HERITAGE; A TECHNICAL AND ARTISTIC CELEBRATION OF THOUGHTFUL DESIGN
4	Gaute Mo, Mario Rando, Kathleen Overton, Fernando Ibáñez Climent and Altea Cámara Aguilera	BOOMERANG AND JUNGLE BRIDGES : CONNECTING CITY AND FOREST
5	Gaute Mo, Fernando Ibañez Climent, Alberto Ordiñana, Göran Werme, Henrik Hermansson and Johan Eriksson	VÄSTER PEDESTRIAN AND CYCLE BRIDGE: CONNECTING THE TOWN CENTRE WITH A NEW DEVELOPED AREA
6	Finn Graham and Ben Curry	"HAMS WAY FOOTBRIDGE: CASE STUDY OF A MODERN AND SUSTAINABLE PEDESTRIAN AND CYCLE OVERBRIDGE"
7	Pedro Pablo Arroyo Alba and Fernando Porras-Isla	AS SMALL INFRASTRUCTURES MAKE A GREAT LANDSCAPE: GREEN BELT 7 BRIDGES PROJECT, IN LINGANG, SHANGHAI.
8	Martin Halpin and Lee Canning	"LANCASHIRE COUNTY COUNCIL ST MICHAELS AND CARNFORTH FOOTBRIDGES-UNITED KINGDOM"

ROOM B

Existing bridges. Session chair: Héctor Beade

1	Rob Kruizinga, Marion Kresken and Tako van Midwoud	HOW LIGHTING CAN BRING A BRIDGE TO LIFE
2	Chris Spierings and Ronald Rozemeijer	TRANSFORMING OBSTACLES INTO ICONS - BRIDGES AS KEY ELEMENTS IN CYCLING NETWORKS
3	Edmund Metters and Sean Dean	BREATHING LIFE INTO AN URBAN CONNECTION BY REUSING FOUNDATIONS AND DERELICT LAND IN KINGSTON, LONDON
4	Gábor Pál, Attila Dési and András Kemenczés	CONTINUOUS ARCH BRIDGES OVER LAKE TISZA, HUNGARY
5	Nicolas Sterling	THE "PONT DU LION", SAINT-GENIS POUILLY, FRANCE: A CREATIVE TRANSFORMATION TO REDEFINE THE CITY ENTRANCE
6	Calum Lockhart and Edmund Metters	GHOSTS OF THE ERIE CANAL: PAST, PRESENT, AND FUTURE
7	Donald MacDonald, Eric Birkhauser and Steve Line	BRINGING LIFE TO EXISTING BRIDGES AND PROVIDING NEW CONNECTIONS; THE TRANSFORMATION OF MAJOR NORTH AMERICAN BRIDGES
8	Mario Guisasola	LEGARRETA BRIDGE PEDESTRIAN ENLARGEMENT IN VILLABONA

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9	Wojciech Barcik, Jan Biliszczuk, Joanna Styrylska, Jacek Szczepański and Robert Toczkiewicz	STRESS RIBBON FOOTBRIDGE OVER THE BYSTRZYCKIE LAKE IN ZAGÓRZE ŚLĄSKIE – DESIGN AND CONSTRUCTION
10	Chelene Wong, Schaun Valdovinos and Barbara Lee	REVITALIZATION OF THE SEATTLE WATER-FRONT

THURSDAY 08/09/2022 11:00 - 13:30

ROOM A

Context as experience. Session chair: Fernando Ibáñez

1	Hector Beade-Pereda	CONTEXTUAL FOOTBRIDGE DESIGN
2	Rico Fischer, Victor Rodríguez Izquierdo, Guido Ludescher and Robert Hajdu	CAMPUS BRIDGE HEILBRONN
3	Mauro Vitale and Andrea Tognetti	NEW ICONIC CROSSING ACROSS THE SCIO-TO RIVER, DUBLIN - OHIO
4	Stephen Van Dyck and Scott Crawford	GRAND AVENUE TRAVERSE: UNITING ACCESSIBILITY, UTILITIES AND ECONOMY INTO A NEW EXPERIENCE
5	Paulo Fidalgo, Rui Almeida, Paulo Cachim, Elsa Caetano and Álvaro Cunha	TREE TOP WALK AT SERRALVES PARK, PORTUGAL
6	Manuel Reventós Rovira and Jaume Guàrdia Tomàs	DESIGN. CREATE. LEARN. REPEAT.
7	Ian Wilson, Martin Hooton, Joan Valls Mestre, Ben Addy and Ezra Groskin	SOMERS TOWN BRIDGE, A MODERN FOOT-BRIDGE FOR A HERITAGE SETTING
8	Alistair Oliver	BRIDGE FAILURE AND PUBLIC PERCEPTION OF SAFETY: MANAGING SITUATIONS THE PUBLIC SEE AS DANGEROUS
9	Mark Langridge	TWO MODERN CROSSINGS IN HISTORIC CANADIAN SITES: CREATING "PLACES FOR PEOPLE"
10	Khai Seng Chew, Kok Keong Choong, Chern Phern Wong and Mohd Zaki Abdullah	SALOMA LINK FOOTBRIDGE – THE KUALA LUMPUR ICONIC FOOTBRIDGE
11	Delio Corbara and Odine Manfroni	MONTEFIORE FOORBRIDGE: COMPLEXI-TY FOLLOWING SIMPLE AND RECURSIVE ELEMENTS

ROOM B

Experimentation. Session chair: Carlos Lázaro

1	Simon Fryer and Thomas Eckhart	LESSONS LEARNT FROM THE DESIGN AND CONSTRUCTION OF THE LILLE LANGEBRO
2	Christoph Hasler and Arndt Goldack	THREE DIMENSIONAL FEM CALCULATION OF STRESS RIBBONS ON SADDLES
3	Daniel Bowmer and James Harrison-King	KNOSTROP FOOTBRIDGE - INNOVATIVE DESIGN SOLUTIONS
4	Sone August Noekland and Haldis Nærum	THE CABLE NET BRIDGE -- IN THE OLDEST CITY OF NORWAY
5	Bartlomiej Halaczek and Knight Martin	CAMPUSBRÜCKE OPLADEN - APPLYING SUSTAINABLE DESIGN STRATEGIES WITHIN CHANGING CONSTRAINTS
6	Peter Tanner	DESIGN FOR ROBUSTNESS: BURDEN OR OPPORTUNITY?
7	Koon Lok Stephen Nip	INTEGRATING EMBODIED CARBON FEED-BACK INTO FOOTBRIDGE DESIGN
8	Michael Thorogood	MECHANICAL INNOVATIONS DEVELOPED FOR THE LILLE LANGEBRO SWING BRIDGE, COPENHAGEN
9	Juan Jose Jorquera-Lucerga and Juan Manuel García-Guerrero	STIFFENED HANGERS: AN OFTEN OVER-LOOKED TOOL FOR CONCEPTUAL DESIGN OF TIED-ARCH FOOTBRIDGES
10	Masato Aoki and Fumio Sek	STUDY ON 3D TRUSS FLEXIBLE SHAPE BRID-GE USING ORIGAMI ENGINEERING

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THURSDAY 08/09/2022 14:30 - 16:00

ROOM A

Context as experience. Session chair: Alejandro Bernabéu

1	Hector Beade-Pereda, Bogdan Barbulescu and John McElhinney	ST. PHILIPS FOOTBRIDGE IN BRISTOL. A DESIGN EMERGING FROM THE CONTEXT AND ITS CONSTRAINTS
2	Clotilde Robin, Catherine Ramsden and George Oates	CHISWICK PARK FOOTBRIGDE – IMPORTANCE OF BRIDGE DESIGN IN URBAN ENVIRONMENT
3	Marco Peroni, Nicolò Minguzzi and Enrico Favi	"UNSTABLE BRANCH" FOOTBRIDGE IN BORGO RIVOLA (RA), ITALY
4	Toon Maas, Mohamad Tuffaha and Laurent Ney	FOOTBRIDGES AS AN IMPORTANT PART OF A SYSTEM: THE CONTEXT AS AN EXPERIENCE
5	Stephen James, Kilian Karius, Tomasz Gapinski	VARVSBRON, INNOVATION IN BRIDGE DESIGN & ADVANCED SURFACE MODELLING
6	Nicolas Sterling and Elke Sterling-Presser	CREATING "MOMENTUM"

ROOM B

Dynamics. Session chair: Iván Muñoz

1	Vítor Dacol, Elsa Caetano and João Correia	DYNAMIC DESIGN LOADS AND PERFORMANCE OF A GFRP-SFRSCC HYBRID FOOTBRIDGE PROTOTYPE
2	Maximilian Stasica, Guoping Zhao, Max Fritzsche, Gregor Schwinn, Julia Frankenstein and André Seyfarth	A SETUP FOR ASSESSING THE ACCEPTANCE OF VIBRATIONS TO IMPROVE FOOTBRIDGE DESIGN
3	Javier Naranjo, Carlos M.C. Renedo, Christian Gallegos-Calderón, José M. Goicolea and Iván M. Díaz	DYNAMIC RESPONSE OF FOOTBRIDGES IN EUROCODES: TOWARDS AN ACCURATE ASSESSMENT OF HUMAN-INDUCED VIBRATIONS
4	Christian Gallegos-Calderón, Javier Naranjo-Pérez, José M. Goicolea, Jaime H. García-Palacios and Iván M. Díaz	DYNAMIC RESPONSE PREDICTION OF LIGHTWEIGHT PEDESTRIAN STRUCTURES: EQUIVALENT CROWD-STRUCTURE SYSTEM
5	Rocio García Cuevas, Javier Fernando Jiménez-Alonso, Francisco Martínez and Ivan M Díaz	EVALUATION OF THE LATERAL VIBRATION RESPONSE OF FOOTBRIDGES UNDER UNCERTAINTY CONDITIONS
6	Niklas Johansson	A SIMPLIFIED DYNAMIC ANALYSIS OF EXISTING PEDESTRIAN BRIDGES, A POSSIBILITY TO GET NEW EXPERIENCE FOR DESIGNING

THURSDAY 08/09/2022 16:30 - 18:30

ROOM A

Learning from experience. Gianfranco Bonzini

1	Magnús Arason, Kristján Óskarsson, Andri Gunnarsson and Terje Krommen	WHEN BUILDING A BLUE FOOTBRIDGE: CONSTRUCTION CHALLENGES
2	Jeremy LaHaye	FATIGUE TESTING OF CABLES - ISSUES AND LESSONS LEARNED
3	Emily Perchlik and Donald MacDonald	SPANNING THE AMERICAN WEST: BOOTSTRAPPING OPPORTUNITIES FOR DESIGN IN AN ENGINEERING LED CONTEXT
4	Michel Schreinemachers and Wiebe Strick	A GOLDEN RATIO FOR SHAPING THE CURVE – LESSONS LEARNED
5	Gerhard du Plessis, Edwin Kruger and Alan Agaienz	CHALLENGES IN PROCUREMENT, DESIGN AND CONSTRUCTION OF THE ERASMUSRAND PEDESTRIAN BRIDGE
6	Jiri Strasky, Pavel Sliwka, Pavel Kalab and Lenka Zapletalova	NEW SUSPENSION FOOTBRIDGES
7	Jiri Strasky, Tomas Romportl, Pavel Kalab and Leonard Sopik	NEW ARCH FOOTBRIDGES
8	Kristjan Uni Oskarsson and Magnus Arason	A CHALLENGING SLENDERNESS - NONNEKLOPPEN BRIDGE IN BERGEN

ROOM B

Remote places. Session chair: Ignacio Payá

1	Laurie Elkowitz, Nicholas Belitsis and Edward Segal	ENHANCEMENTS FOR RAPIDLY DEPLOYABLE SUSPENDED FOOTBRIDGES
2	Thomas Allen, Javier Cañada Pérez-Sala, Constantina Coureas, Grace Porter, Javier Sánchez Fernández, Estelle Schurer, Moisés Eugenio Batres Alvarenga and Óscar Ernesto Rodríguez Flores	FOOTBRIDGE FOR THE SCHOOL OF EL YOMO IN EL SALVADOR
3	Rudolf Brandstötter	THE "PICCARD BRIDGE" IN OBERGURGL, AUSTRIA
4	John Anderson and Warrick De Kock	ADAPTING THE SIMPLE THROUGH GIRDER TO SIT IN NATURE, THE WUPPERTHAL FOOTBRIDGE
5	Robert Groeli	BUILDING 8500+ TRAIL BRIDGES IN THE HIMALAYAS
6	Alejandro Bernabeu Larena, Javier Gómez Mateo, Jorge Bernabeu, Francisco Burgos Ruiz and Ginés Garrido Colmenero	GOIAN – CERVEIRA FOOTBRIDGE OVER THE MIÑO RIVER. SPAIN - PORTUGAL
7	Devin Connell, Avery Bang and Nicola Turrini	PARTNERSHIPS TO PROVIDE CRITICAL ACCESS; NATIONAL RURAL INFRASTRUCTURE PROGRAMMING IN RWANDA
8	Sofía Andrade, FabiÁn Lamus and Carlos UrazÁn	SHORT SPAN MODULAR BRIDGES OF GUADUA ANGUSTIFOLIA BY SELF CONSTRUCTION, A SUSTAINABLE ALTERNATIVE

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FRIDAY 09/09/2022 10:30 - 12:15

ROOM A

Context as experience. Session chair: Juan Sobrino

1	Keith Brownlie	WHEN IS A FOOTBRIDGE NOT A FOOTBRIDGE? AN INVESTIGATION INTO THE PEDESTRIAN REALM OF VEHICULAR BRIDGES
2	Raul Escriva	FOOTBRIDGE TO THE OSCAR NIEMEYER INTERNATIONAL ART CENTRE
3	Andreas Keil, Sebastian Linden and Christiane Sander	THE NEW MILL-BRIDGE IN BESIGHEIM, GERMANY
4	Geoff Thompson and John McNeil	TIROHANGA WHANUI FOOTBRIDGE, AUCKLAND, NZ, INCORPORATION OF MAORI 'KORERO' CULTURAL NARRATIVES
5	Cezary Bednarski	WHO CARRIES THE CAN AND WHO GETS OFF THE HOOK (WHAT DOES SOCIETY EXPECT + WHO CONTROLS DELIVERY)
6	António Adao Da Fonseca, Renato O. Bastos, Tiago Alves	"BACK TO SIMPLICITY ON FOOTBRIDGE DESIGN: FOOTBRIBGE OVER RIVER AVE, IN VILA DO CONDE, PORTUGAL"
7	Juan Sobrino and Mark Langridge	CSA GUIDELINES FOR PEDESTRIAN BRIDGE DESIGN

ROOM B

Dynamics + context as experience. Session chair: Niklas Johansson

1	Konstantinos Georgiadis, Ana M. Ruiz-Terán and Peter J. Stafford	INVESTIGATION OF THE DYNAMIC BEHAVIOUR OF STRESS-RIBBON FOOTBRIDGES UNDER PEDESTRIAN ACTIONS
2	Maximilian Stasica, Julia Frankenstein, Gregor Schwinn, Guoping Zhao and Andre Seyfarth	PHYSICAL AND PSYCHOLOGICAL FACTORS INFLUENCING THE ACCEPTANCE OF VIBRATIONS ON LIGHTWEIGHT FOOTBRIDGES
3	Álvaro Magdaleno, Julio Vivas, Soledad Rodríguez, Juan Carlos Santos and Antolin Lorenzana	DYNAMIC ASSESSMENT OF THE LONGEST SINGLE-SPAN TIMBER-FOOTBRIDGE IN SPAIN.
4	Brian Duguid	BRIDGES FOR WOBBLY PEOPLE - BALANCE DISORDERS AS AN EXAMPLE OF INCLUSIVE DESIGN
5	Ian Wilson, Martin Hooton, Solene Fercocq, Ben Addy and Ezra Groskin	ESPERANCE BRIDGE - AN INNOVATIVE TAKE ON A TRUSS BRIDGE
6	Mark Wing and Richard Woolf	RADNOR BRIDGE, PART OF A SYSTEM: THE CONTEXT AS AN EXPERIENCE
7	Edmund Metters and Kenneth Leung	ENGAGING THE PUBLIC THROUGH THE DESIGN OF THE EASTWICK AND SWEETWATER FOOTBRIDGE, LONDON

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VENUE

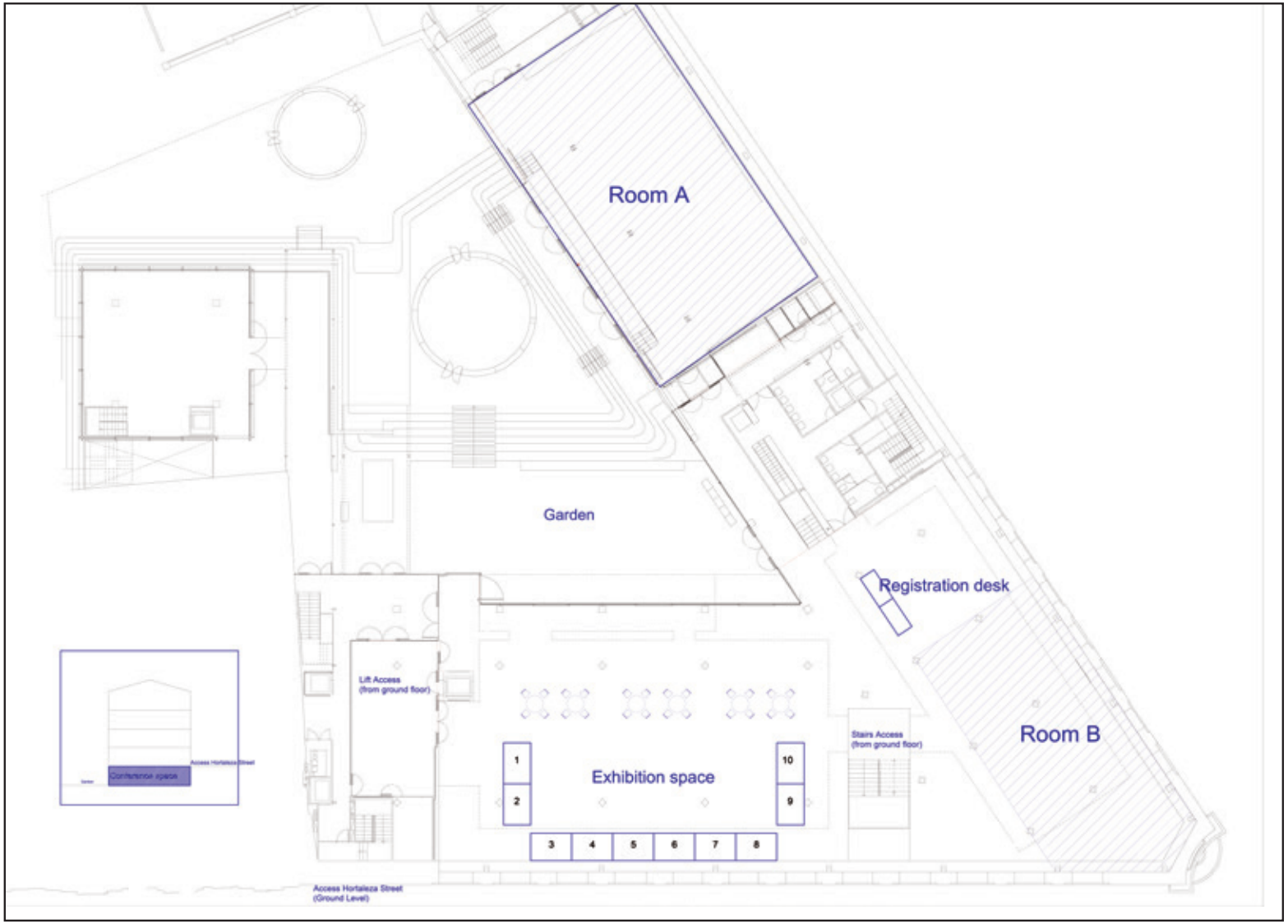
The conference will take place in the Madrid Architects' Association Headquarters (COAM).

The address of the venue is:
COAM - LA SEDE
Hortaleza Street, n 63
28004 Madrid – Spain

How to arrive:
COAM - LA SEDE is located in the heart of Madrid's city center. Arriving to the congress venue by public transportation is highly recommended.

Buses: 1,2,3,46,74

Subway: Nearest subway stations are Chueca (3 min. walk to the venue, line 5) and Tribunal (5 min. walk to the venue, lines 1 and 10)



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