

CONFERENCE PROGRAMME

Format

The Conference Programme comprises 7 Keynote Lectures, 9 Plenary Lectures, 6 Parallel Sessions, a Round Table and 3 Poster Sessions. There will be also Opening and Closing Sessions and a Final Lecture.

The Opening and Closing Sessions, the Keynote and the Plenary Sessions will take place in the Auditorium, whereas the Parallel Sessions will be developed simultaneously in three rooms: Auditorium, Room B032 and Room B035. Posters will be introduced in the morning Plenary/ Keynote Sessions and will be displayed and discussed in the Coffee Break Area during the corresponding periods.

Day 1				2 nd July
	Auditorium	Room B032	Room B035	
08:00 - Registration				
09:00-09:30	Opening Cerimony	---	---	
09:30-10:00	Keynote 1	---	---	
10:00-10:30	Keynote 2	---	---	
10:30-10:35	Introduction of Posters	---	---	
10:35-11:00	Poster Presentation and Coffee-break			
11:00-13:00	Parallel session A.1 Large Projects	Parallel session B.1 New materials and innovations	Parallel session C.1 Dynamics- models	
13:00-14:30	Lunch			
14:30-15:00	Keynote 3	---	---	
15:00-16:00	Plenary session P.1	---	---	
16:00-16:30	Coffee-break			
16:30-18:00	Parallel session A.2 Conceptual Design	Parallel session B.2 Truss and continuous footbridges	Parallel session C.2 Dynamics- control of vibrations	
18:00	Bus – Cocktail			
18:30-21:00	Cocktail and Awards			

Day 2				3 rd July
	Auditorium	Room B032	Room B035	
09:00-09:30	Keynote 4	---	---	
09:30-10:30	Plenary session P.2	---	---	
10:30-10:35	Introduction of Posters	---	---	
10:35-11:00	Poster Presentation and Coffee-break			
11:00-13:00	Parallel session A.3 Dynamics- general aspects	Parallel session B.3 Structural analysis and behaviour	Parallel session C.3 Cable-stayed and suspension footbridges	
13:00-14:30	Lunch			
14:30-15:00	Keynote 5	---	---	
15:00-16:00	Parallel session A.4 Conceptual design	Parallel session B.4 Dynamics- design rules	Parallel session C.4 Continuous footbridges	
16:00-16:30	Coffee-break			
16:30-18:00	Parallel session A.5 Arch footbridges	Parallel session B.5 Design- various projects	Parallel session C.5 Dynamics- models	
18:00-18:30	Sponsors intervention	---	---	
19:00	Bus – Banquet			
19:30-23:00	Conference Banquet			

Day 3			4 th July
	Auditorium	Room B032	Room B035
09:00-09:30	Keynote 6	---	---
09:30-10:30	Plenary session P.3	---	---
10:30-10:35	Introduction of Posters	---	---
10:35-11:00	Poster Presentation and Coffee-break		
11:00-13:00	Parallel session A.6 New materials and innovations	Parallel session B.6 Dynamics- measurements	Parallel session C.6 Structural analysis and behaviour
13:00-14:30	Lunch		
14:30-15:00	Keynote 7	---	---
15:00-16:00	Round Table	---	---
16:00-16:30	Coffee-break		
16:30-18:00	Closing ceremony: Young authors Prize Final Lecture Footbridge 2011	---	---

INFORMATION FOR AUTHORS

Oral Presentations

Authors must deliver their powerpoint presentations to the technical staff of Footbridge 2008 present in each room (Auditorium, B035, B032), at least during the 30 minutes before the corresponding session.

The author that will present each paper must be at the room defined at the Technical Programme 15 minutes before the beginning of the session, in order to participate in a brief meeting with the session chairs.

Poster Presentations

Authors must install their posters in their reserved panel in the morning of the scheduled day, in the period 8:30-9:00.

An introduction to the poster is presented at the end of the first morning, based on a one slide per poster supplied by the authors (see Poster guidelines in webpage).

TECHNICAL PROGRAMME

WEDNESDAY, 2 JULY - MORNING

9:30-10:30 Keynote Lectures (Auditorium)

Footbridges in Portugal

António Adão da Fonseca

Design of footbridges - are there limits?

Andreas Keil

11:00-13:00 Parallel Session A.1 (Auditorium)

Non-iconic footbridges

Poul Ove Jensen

Balcony to the sea - The curved suspension bridge in Saßnitz, Germany

Mike Schlaich; Andreas Keil; Knut Stockhusen & Sebastian Linden

Ypsilon - Footbridge over river Drammen

Arne Eggen; Nanna Meidell & Knut Gjerding-Smith

Macintosh Island pedestrian bridge, Gold Coast Australia

Matt Carter; Peter Burnton ; Rob Mowat & Kevin o'Donnell

Forthside Bridge, Stirling, Scotland

Keith Brownlie; Peter Curran & Steve Thompson

Holyhead pedestrian link

Andrew Paul Marginson & Arwel Rees Roberts

11:00-13:00 Parallel Session B.1 (Room B032)

Design and construction of New Zealand's first UHPC footbridges

Gavin Wight & Mark Rebentrost

Composite bridges and vacuum infusion a 44m footbridge for Delft

Liesbeth Tromp

Design of a pedestrian bridge made with pultruded profiles of fibreglass-reinforced plastics in Prato

Alessandro Adilardi & Lorenzo Frasconi

Pedestrian steel arch bridge with composite polymer deck

Bartomiej Grotte; Wojciech Karwowski; Przemysław Mossakowski;
Marcin Wróbel; Henryk Zobel & Piotr Żółtowski

Viana do Castelo moving footbridge (Portugal) - Construction methods

Ricardo Barbosa

Design of modular steel footbridge for small and medium spans

Monica Bresciani

11:00-13:00 Parallel Session C.1 (Room B035)

Pedestrian dynamics and footbridges

Miroš Pirner & Shota Urushadze

Exploratory data analysis of human-induced dynamic load in structures

Renata G. Faisca; Diane P. Coutinho ; Carlos Magluta & Ney Roitman

A running pedestrian dynamic load model for footbridges

Antonio Occhiuzzi & Mariacristina Spizzuoco

Vertical footbridge vibrations: The response spectrum methodology

Christos T. Georgakis & Einar Thór Ingólfsson

Vertical footbridge vibrations: Details regarding and experimental validation of the response spectrum methodology

Einar Thór Ingólfsson; Christos T. Georgakis & Martin Nymann Svendsen

Vibration serviceability of footbridges: a closed-form solution
Federica Tubino & Giuseppe Piccardo

WEDNESDAY, 2 JULY - AFTERNOON

14:30:15:00 Keynote Lecture (Auditorium)

Pursuit of bridge aesthetics in China - a personal experience
Man-Chung Tang

15:00-16:00 Plenary Session P.1 (Auditorium)

Stress-ribbon pedestrian bridges supported or suspended on arches
Jiri Strasky

Aesthetic aspect of some footbridge designs
Youssef Ghali

Suspension bridges in urban context - Paris v Krakow (design competitions)
Cezary M Bednarski

16:30-18:00 Parallel Session A.2 (Auditorium)

Lessons from design competitions Henderson Colloquium 2007
Keith Brownlie

On bridge design
Luis Cândia Martins

Architecture of footbridges 4 projects by Hugh Dutton Associates
Hugh Dutton

Design with and without Architects - two footbridges at Guadalajara
Peter Tanner & Juan Luis Bellod

New design philosophy of footbridge
Takahiro Kishimoto; Yoshiaki Kubota & Masashi Kawasaki

16:30-18:00 Parallel Session B.2 (Room B032)

Cherry Street Footbridge: Innovative design through integrated solution of the site constraints
Andrew Luong; Craig Gibbons & Paul Tsang

Steel footbridge over Tordera river, Tordera (Barcelona, Spain): "Pont de Ferro" (Iron Bridge)
Blai Serena; Juan Ramón Dueso & Daniel Pallàs

Lisbon Oceanarium access bridge
António Póvoas

Repair and recycle of a metallic bridge in Tui
Antonio González Serrano

Castelló d'Empúries Footbridge
Manuel Reventós & Guillem Collell

Structural continuity and relativity for footbridge designs
Yoshiaki Kubota & Takahiro Kishimoto

16:30-18:00 Parallel Session C.2 (Room B035)

Examination of own human comfort criteria for footbridges in case of wind-induced vibrations
Andrew Flaga; Mark Pańtak & Thomas Michałowski

Dynamic amplification factors for footbridges - Experimental approach
Sylwia Adamcewicz; Jan Bien; Pawel Rawa & Jaroslaw Zwolski

Multiple tuned mass damper controlling vibrations of a footbridge
Daniel Gomes; Suzana Avila & Graciela Doz

Modular tuned mass dampers for pedestrian footbridges
Philippe Duflo & Doug Taylor

Effect of a tuned mass damper in footbridge design
Caspar Breman; Bert Snijder; Herke Stuit & Monique Bakker

Poster Session Pt1 (Coffee-break area)

Footbridge: tools for a sustainable urban environment
Fabrizia Zorzenon

Footbridge in the Campus of the University of Aveiro - Conception, design and construction
António Adão da Fonseca

Carpinteira Footbridge, at Covilha - Conception, design and construction
António Adão da Fonseca; Carlos Quinaz; Renato Bastos & Miguel Pereira

Footbridge over the new west by-pass motorway in Sabadell
Manuel Reventós Rovira; Jordi Pascual Gilabert & Guillem Collell Mundet

Joan Camps Footbridge over the River Congost in Granollers (Spain)
Xavier Font; Lee Bowker & John Hawkins

Design for charity bridges in comparative conception
Lisha Ren; Tobia Zordan; Enzo Siviero & Zhengsheng Yin

THURSDAY, 3 JULY - MORNING

9:00-9:30 Keynote Lecture (Auditorium)

Codes of practice for lively footbridges: State-of-the-art and required measures
Christiane Butz

9:30-10:30 Plenary Session P.2 (Auditorium)

Conclusions from the Workshop on 1 July
David Mackenzie

Vibration performance of footbridges under pedestrian traffic
Stana Živanović; James Brownjohn & Aleksandar Pavić

Lessons from the practical implementation of a passive control system at the new Coimbra Footbridge
Elsa Caetano; Álvaro Cunha; Carlos Moutinho & Filipe Magalhães

11:00-13:00 Parallel Session A.3 (Auditorium)

Pedestrian on footbridges, vertical loads and response
Krzysztof Zoltowski

Soft issues in the design of long span footbridges and cycle bridges
Angus Low

Arched footbridge - architectural elegance and engineering challenges
Max Baagøe Rasmussen; Mogens Saberi; Jens Døssing & Christian von Scholten

The Serravalle footbridge in the Republic of San Marino
Odine Manfroni & Sergio Casadei

Dynamic analysis and vibration control of the twin deck curved suspension foot/cycle bridge "Ponte del Mare"
Alessio Bonelli; Manuele Bonora; Oreste Bursi; Stefano Santini; Leonardo Vulcan & Alberto Zasso

Nonlinear cable-deck interaction in cable-stayed footbridges
Benedikt Weber & Patricia Hamm

Wind fences on footbridge: A compromise between structural performance and pedestrian comfort
Lorenzo Procino; Gianni Bartoli; Alessandra Borsani & Claudio Borri

11:00-13:00 Parallel Session B.3 (Room B032)

The Lake Hodges stress ribbon bridge, San Diego, California

Tony Sanchez; Joe Tognoli & Jiri Strasky

Erection design and testing of the IVth Bridge over the Grand Canal in Venice

Bruno Briseghella; Enzo Siviero & Tobia Zordan

Technical challenges in recent winning projects in architect footbridges competitions in Norway

Svein E. Jakobsen; Liv R. Eltvik & Dag I. Ytreberg

Two suspended footbridges in Madrid stiffened with negative stays

Leonardo Fernández Troyano; Moisés Escolá Triola; José Cuervo Fernández; Guillermo Ayuso Calle & Celso Iglesias Pérez

A self anchored suspension pedestrian bridge over Harbor Drive in San Diego

Daniel J. Fitzwilliam & Joe Tognoli

A cable-stayed footbridge in Bormio (Italy)

Matteo Moratti; Dario Compagnoni & Gian Michele Calvi

A new stone stress ribbon pedestrian bridge in Verona

Fulvio Busatta; Carlo Pellegrino; Manuel Grendene & Claudio Modena

11:00-13:00 Parallel Session C.3 (Room B035)

Structural design and research of a double-deck cable-stayed footbridge connecting the Customhouses of Shenzhen and Hongkong

Xu Gongyi; Du Hongliang & Gao Mangmang

A metallic stayed footbridge "Agro" in Arteixo (Corunna) Spain

Antonio González Serrano

Cable-stayed footbridge at Weil der Stadt, Germany

Nils Svensson; Hans-Peter Andrä & Uwe Häberle

Cable stayed footbridge over Sile River in Treviso, Italy

Diego Lodoli

"Ponte del Mare": A cable stayed footbridge in Pescara

Enzo Siviero; Mario de Miranda; Vitalba D'Aguanno; Alberto Zanchettin; Luciano di Biase & Pierpaolo Pescara

Suspension footbridge with slender concrete deck over the San River in Sanok

Marek Salamak

Design of a pedestrian bridge in a historical spot

António Braga; Hugo Pinto; Joana Teixeira & Alvaro Azevedo

THURSDAY, 3 JULY - AFTERNOON

14:30-15:00 Keynote Lecture (Auditorium)

Study on pedestrian-induced vibration of footbridge

Limin Sun & Xubin Yuan

15:00-16:00 Parallel Session A.4 (Auditorium)

Arch and cable-supported hybrid pedestrian bridges

Shao-Zhen Chen; Yan Zhang; Yao-Jun Ge; Chun-Kai Li & Li-Ping Xu

Bowstring footbridges in the cycling ring road in Madrid

Francisco Millanes Mato; Luis Matute Rubio & Jorge Nebreda Sánchez

Conceptual design of moving footbridges

John Cutlack

14:30-16:00 Parallel Session B.4 (Room B032)

Design methodology for pedestrian induced footbridge vibrations

Chris Barker & David Mackenzie

Vibrations on the "La Ralentie" footbridge. An application to an existing footbridge of the French guidelines
Pascal Charles

Serviceability assessment of three lively footbridges in Reykjavik
Gudmundur V. Gudmundsson; Einar Thór Ingólfsson ; Baldvin Einarsson & Bjarni Bessason

14:30-16:00 Parallel Session C.4 (Room B035)

Vallvidrera footbridge
Manuel Reventós Rovira & Jordi Pascual Gilabert

Footbridge over the River Cardener in Callús (Barcelona, Spain)
Xavier Font; Lee Bowker & John Hawkins

Conceptual design of a footbridge in the historical part of Wrocław
Jan Biliszczuk; Wojciech Barcik; Mariusz Sułkowski; Paweł Hawryszków; Tomasz Boniecki & Joanna Styrylska

16:30-18:00 Parallel Session A.5 (Auditorium)

The Pedro and Ines footbridge at Coimbra- conception, design and construction
António Adão da Fonseca

Footbridge near School C+S in Guarda, Portugal
Tiago Mendonça

New footbridge over the Historic Rideau Canal in the heart of Canada's Capital
Sylvain Montminy & Ron Jack

Footbridge over the Sec River
Manuel Reventós; Albert Mas & Marius Quintana

A stress ribbon footbridge as the tie of an arch bridge
Michele Fabio Granata & Marcello Arici

16:30-18:00 Parallel Session B.5 (Room B032)

The design of five recent landmark footbridges in Western Australia
Graeme Dundas

Pedestrian bridges in Benavente, Cacém and Viseu, Portugal
Luis Câncio Martins

Four pedestrian bridges in Bulgaria - design and construction
Encho Dulevski

Footbridges in Wrocław, Poland
Jan Biliszczuk; Jozef Rabiega & Janusz Tadla

Designs of the four pedestrian bridges in Podgorica
Zeljka Radovanovic

16:30-18:00 Parallel Session C.5 (Room B035)

A probabilistic engineering load model for pedestrian streams
Christiane Butz

Crowd-structure synchronization: coupling between Eulerian flow modeling and Kuramoto phase equation
Joanna Bodgi; Silvano Erlicher; Pierre Argoul; Olivier Flamand & Frédéric Danbon

A new load model of the pedestrians lateral action
Fiammetta Venuti & Luca Bruno

Synchronous lateral excitation on lively footbridges: modelling and application to the T Bridge in Japan
Fiammetta Venuti & Luca Bruno

A discrete-time model for the phenomenon of synchronous lateral excitation due to pedestrians motion on footbridges
Stefano Lenci & Laura Marcheggiani

Poster Session Pt2 (Coffee-break area)

The pedestrian speed - density relation: modelling and application

Luca Bruno & Fiammetta Venuti

Vibration comfort criteria for pedestrians on footbridges

Andrew Flaga & Mark Pańtak

Increase of the structural damping due to the application of tuned mass dampers TMD subject to the footbridge construction

Christian Meinhardt; Oliver Dressen & Frank Dalmer

Effectiveness of horizontal tuned mass dampers exemplified at the footbridge in Coimbra

Christiane Butz; Johann Distl & Peter Huber

Fluid viscous dampers: an effective way to suppress pedestrian-induced motions in footbridges

Philippe Duflo & Doug Taylor

FRIDAY, 4 JULY - MORNING

9:00-9:30 Keynote Lecture (Auditorium)

Advanced composite materials for footbridges

Urs Meier

10:00-11:00 Plenary Session P.3 (Auditorium)

Spatial footbridges. Some proposals

Javier Manterola Armisen; M. Ángel Astiz Suárez; M. Ángel Gil Ginés; Antonio Martínez Cutillas & Javier Muñoz-Rojas Fdez.

Footbridges - Gesamtkunstwerk and test-bed for all bridges

Ursula Baus & Mike Schlaich

Five pedestrian bridges in New York City - process and design

Rebecca Nixon Pe & Guy Nordenson Pe Se

11:00-13:00 Parallel Session A.6 (Auditorium)

Three pedestrian steel bridges in Spain

Juan A. Sobrino

Engineering the Sackler crossing

Simon Fryer

Duplex stainless steel - a material for both the functional footbridge and the spectacular landmark

Anders Finnås & Béla Leffler

Pedestrian bridges combining stainless steel and glass-fiber reinforced polymers as structural members

Daia Zwicky & Juan A. Sobrino Almunia

Composite 'Delta Deck' of innovative snap-fit connection for new and rehabilitated footbridges

Sung Woo Lee; Kee Jeung Hong & Jaap Ketel

Design for buckling and vibration of glass FRP pultruded footbridges

Fabio Minghini; Nerio Tullini & Ferdinando Laudiero

Inflatable pedestrian bridge

Marco Peroni

11:00-13:00 Parallel Session B.6 (Room B032)

Experimental identification of the dynamic properties of three different footbridge structures

Marek Salamak & Piotr Lazinski

Experimental and numerical analysis of the pedestrian-induced vibrations of a footbridge

Peter Van den Broeck; Guido de Roeck; Edwin Reynders & Daan Degrauwe

Dynamic tests and continuous monitoring of a moveable cable-stayed bridge

Filipe Magalhães; Elsa Caetano & Álvaro Cunha

Experimental tests on the Guarda footbridge

Hugo Pimenta; Carlos Rebelo & Constança Rigueiro

Operational modal analysis and updating of a footbridge

Daan Degrauwe; Edwin Reynders; Guido de Roeck & Peter Van den Broeck

Forced vibration tests carried out on a laminated timber footbridge: comparisons five years apart

Pier Paolo Diotallevi; Odine Manfroni & Claudia Belmonte

Role of non-metallic components on the dynamic behaviour of composite footbridges

Andrea Brasiliano; Graciela Doz; José Luís V. Brito & Roberto Pimentel

11:00-13:00 Parallel Session C.6 (Room B035)

A moveable footbridge at Viana do Castelo - Portugal

Jorge Delgado; Raimundo Delgado; Mafalda Lopes; Tiago Gonçalves & Gonçalo Lopes

Cable-stayed footbridge made of glued-laminated wood erected in Sromowce Nizne, Poland

Jan Biliszczyk; Paweł Hawryszków; Mariusz Sułkowski & Adam Maury

Design of a long steel footbridge with curved Y-form

Antonio Romero

Design of a footbridge in Porto with nonlinear lateral buckling analysis

João Fonseca; Bogdan Stankiewicz & Ryszard Kowalczyk

The Aldeias Footbridge at Gouveia: Design, construction and dynamic behavior

Rui Alves; Fernando Barbosa & Elsa Caetano

Footbridges at the Prat Airport in Barcelona, Spain

Juan D. Gómez & Alfredo Arnedo

A Light steel footbridge in the restoration of an industrial site in Italy

Antonello Salvatori & Renato Morganti

FRIDAY, 4 JULY - AFTERNOON

14:30-15:00 Keynote Lecture (Auditorium)

Bridge design

Dietmar Feichtinger

15:00-16:00 Round Table (Auditorium)

Aesthetics and Structural Design- open session

Initial intervention: Álvaro Siza Vieira

Panel:

Enzo Siviero (Structural Engineer) - Moderator

Ian Firth (Structural Engineer)

Keith Brownlie (Architect)

Juan Sobrino (Structural Engineer)

Mike Schlaich (Structural Engineer)

16:30-18:00 Closing Ceremony(Auditorium)

Young Authors Prize

Footbridges conference: History, reason and the way forward

Wasoodev Hoopah

Footbridge 2011

Poster Session Pt3 (Coffee-break area)

Footbridges over the River Douro at Porto / Gaia

António Adão da Fonseca

A small metallic footbridge with an eccentric and leaned structural arc in Orense

Antonio González Serrano

An arch bridge in Prato with reinforced earth abutments

Alessandro Adilardi & Filippo Fiorentini

Structural components of given steel footbridge

Tadeusz Wilczynski

Sustainable cable technology for footbridges

Guy Sevoz & Erik Mellier

Special bridges - special tension members. Locked coil cables for footbridges

Martin Bechtold; Barrie Mordue & Friedhelm-Eric Rentmeister