



POLITECNICO
DI MILANO

IABMAS 2012

6th International Conference on
Bridge Maintenance, Safety and Management

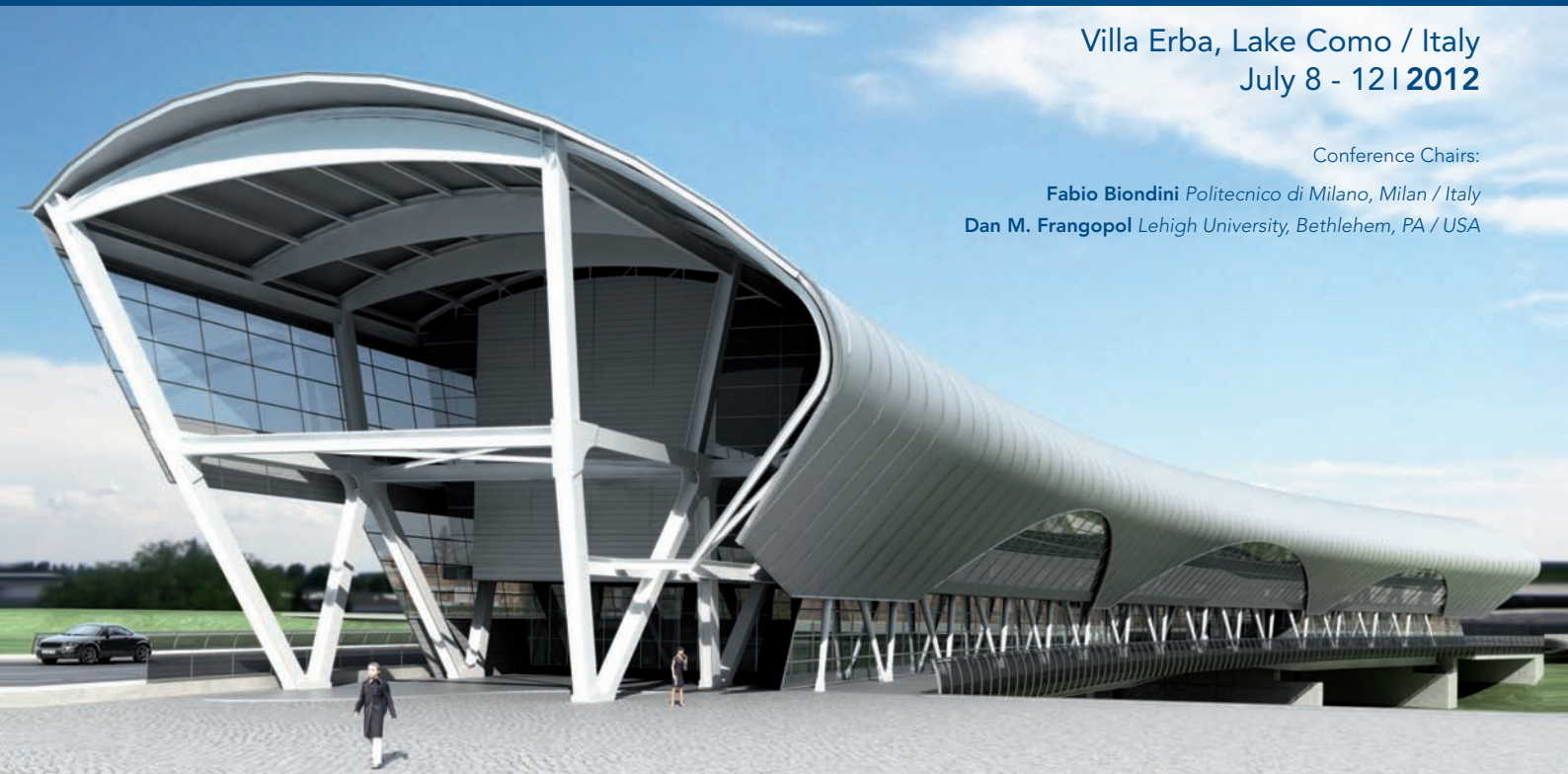
Second Announcement and Call for Papers

Villa Erba, Lake Como / Italy
July 8 - 12 | 2012

Conference Chairs:

Fabio Biondini *Politecnico di Milano, Milan / Italy*

Dan M. Frangopol *Lehigh University, Bethlehem, PA / USA*



IABMAS 2012

The 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012) is organized on behalf of the International Association for Bridge Maintenance And Safety (IABMAS) under the auspices of Politecnico di Milano, Milan, Italy. The Conference will be held in Cernobbio, Como, Italy, on July 8-12, 2012 (<http://www.iabmas2012.org>).

IABMAS

The Association encompasses all aspects of bridge maintenance, safety, and management. The objective of the Association is to promote international cooperation in the fields of bridge maintenance, safety, and management for the purpose of enhancing the welfare of society (<http://www.iabmas.org>).

Aim of the Conference

The aim of IABMAS 2012 is to bring together all the very best work that has been done in the field of bridge maintenance, safety and management and related topics, to stimulate and promote research into this field, and to bridge the gap between theory and practice.

Delegates

The Conference will be of interest to researchers, representatives from all sections of bridge engineering, bridge engineers working with transportation departments, consultants, contractors and local authorities interested in all aspects of bridge maintenance, safety, and management.

Past IABMAS Conferences

IABMAS 2010, Philadelphia, PA, USA	July 11-15, 2010
IABMAS'08, Seoul, Korea	July 13-17, 2008
IABMAS'06, Porto, Portugal	July 16-19, 2006
IABMAS'04, Kyoto, Japan	October 18-22, 2004
IABMAS'02, Barcelona, Spain	July 14-17, 2002

Call for Papers

Authors are kindly invited to submit 300-word abstracts by April 15th, 2011 (extended deadline) through the online submission system available on the Conference website. Authors will be notified regarding the acceptance of their abstracts by May 16th, 2011. Full papers are due by November 18th, 2011. Final acceptance of full papers will be notified by December 31st, 2011.

Call for Mini-Symposia and Special Sessions

Participants interested in organizing Mini-Symposia or Special Sessions as part of IABMAS 2012 are requested to submit a proposal by email to the Scientific Secretariat (papers@iabmas2012.org). Guidelines for preparing Mini-Symposium and Special Session proposals are available on the Conference Website.

Exhibition

A number of exhibit booths will be made available at IABMAS 2012. Detailed information on how to reserve exhibit booths is provided on the Conference website.

Publication

The Conference Proceedings will be published by Taylor & Francis and will be distributed at the Conference to the registered participants. Extended versions of selected papers presented at the Conference will be considered for publication in *Structure and Infrastructure Engineering*, an international peer-reviewed journal endorsed by IABMAS and included in the ISI Science Citation Index (<http://www.tandf.co.uk/journals/nsie>).

Important Dates

Abstract Submission (extended deadline)	April 15th, 2011
Notification of acceptance	May 16th, 2011
Full papers submission	November 18th, 2011
Full papers final acceptance	December 31st, 2011
Deadline Early Bird Registration	February 29th, 2012

CONFERENCE ORGANIZATION

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Mini-Symposia *

- MS 1 – **Field Tests for Bridge Assessment**
Ayaho Miyamoto, Ilkka Hakola
- MS 2 – **SmartEN ITN - Smart Management for Sustainable Built Environment Including Bridges and Structural Systems**
Toula Onoufriou, Rosemarie Helmerich
- MS 3 – **Research and Applications in Bridge Health Monitoring**
F. Necati Catbas, Joan R. Casas, Hitoshi Furuta, Dan Frangopol
- MS 4 – **Risk Based Bridge Management**
Leo Klatzer
- MS 5 – **Reliability Analysis of Bridge Structures**
Franck Schoefs, Francesca Lanata
- MS 6 – **Extreme Events of Long Span Bridges: Design, Assessment and Management**
Airong Chen
- MS 7 – **Smart SHM and Application to Bridge Condition Assessment and Maintenance**
Yunfeng Zhang, Hoon Sohn, Chunsheng Wang, Daniele Zonta
- MS 8 – **Monitoring and Assessment of Bridges using Novel Techniques**
Alfred Strauss, Dan Frangopol
- MS 9 – **Inverse Reliability Analyses Techniques for the Lifetime Assessment of Bridges**
Roman Wendner, Alfred Strauss, Dan Frangopol, Konrad Bergmeister
- MS 10 – **Advances on Structural Robustness and Redundancy of Bridges**
Fabio Biondini, Dan Frangopol
- MS 11 – **Architectural and Engineering issues regarding Inspection and Maintenance of Historical Bridges**
Pier Giorgio Malerba, Vladimir Kristek

Special Sessions *

- SS 1 – **Gusset Plates in Steel Truss Bridges: Testing, Analysis and Monitoring**
Dat Duthinh
- SS 2 – **TEAM: A Marie Curie Training Network on Bridge Management**
Ciaran McNally
- SS 3 – **Strengthening of Existing Bridges with FRP Composites**
Carlo Pellegrino
- SS 4 – **Energy Harvesting in Bridges and Transportation Infrastructure Networks**
Konstantinos Gkoumas
- SS 5 – **Vulnerability of Bridges to Fire and Explosion**
Luisa Giuliani
- SS 6 – **Light Rail Bridges in Chongqing, China**
Man-Chung Tang
- SS 7 – **Advances in Nondestructive Evaluation and Monitoring of Concrete Bridge Decks**
Nenad Gucunski
- SS 8 – **Bridges for High-Speed Railways**
Rui Calçada
- SS 9 – **Artificial Intelligence Methods in Bridge Analysis and Design**
Elsa Garavaglia, Luca Sgambi
- SS 10 – **Sustainability Assessment of Bridges**
Ulrike Kuhlmann

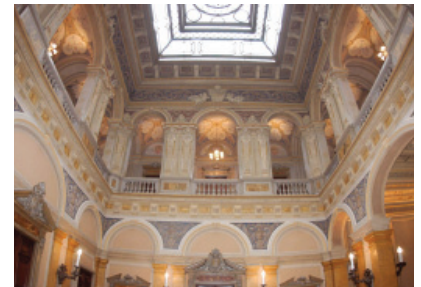
- SS 11 – **Numerical Simulation of Durability of Concrete Bridges**
Airong Chen
- SS 12 – **Steel Bridge Rehabilitation**
Masahiro Sakano
- SS 13 – **Analysis, Design and Testing of Road Timber Bridges**
Alessandro Palermo, Keith Crews, Robert Kliger
- SS 14 – **Risk-based and Disaster Resilience Analysis of Bridge Systems and Networked Infrastructures under Multiple Hazards**
Gian Paolo Cimellaro, Leonardo Dueñas-Osorio
- SS 15 – **Life-Cycle Design and Assessment of Bridges Exposed to Corrosion and other Hazards**
Fabio Biondini, Dan Frangopol, Jamie Padgett, Alessandro Palermo
- SS 16 – **Advanced Technologies in Standard Bridge Structures – from Research to Implementation**
M. Saiid Saiidi
- SS 17 – **Design and Seismic Analysis of Long Span Bridges – Case Studies**
Ayaz H. Malik
- SS 18 – **Advances in Modeling and Analysis for the Performance-Based Design of Bridge Structures subjected to Multiple Hazards**
Francesco Petrini, Alessandro Palmeri
- SS 19 – **Advances in Engineering Structure Management in Finland**
Marja-Kaarina Soderqvist
- SS 20 – **Hydraulic Problems related to Bridges and Infrastructure Systems**
Sauro Manenti
- SS 21 – **Operation and Maintenance of Major Landmark Bridges**
Jens Sandager Jensen
- SS 22 – **Recent Advances in Bridge Health Monitoring**
Christian F. Cremona, André D. Orcesi
- SS 23 – **Optical Monitoring Techniques for Bridge Maintenance and Safety**
Paul Sumitro, Hiroshi Matsuda
- SS 24 – **New Developments on the Bridge Safety, Maintenance and Management in Mexico**
David De Leon
- SS 25 – **Non Deterministic Schemes for Structural Safety and Reliability of Bridges**
Stefania Arangio
- SS 26 – **Structural Control of Bridges and Footbridges: Extreme and Every-day Events**
Luca Martinelli, Marco Domaneschi
- SS 27 – **Integral Bridges: Design and Technological Issues**
Pier Giorgio Malerba, Vladimir Kristek
- SS 28 – **Management and Preservation of Long Span Historic Bridges**
A. Emin Aktan, Franklin Moon, David S. Lowdermilk
- SS 29 – **Many Bridges Aren't Straight - Investigations of Curved and Skewed Structures**
Daniel Linzell
- SS 30 – **Lessons Learnt from the Canterbury Earthquakes: Assessment, Testing and Analysis of New Zealand Bridges**
Alessandro Palermo, Liam Wotherspoon

* As of February 28th, 2011.

THE VENUE

Villa Erba Cernobbio, Como / Italy

Situated on the shores of Lake Como, the complex of Villa Erba includes a magnificent nineteenth century villa and a modern steel and glass construction which hosts the Conference Centre. Known chiefly as the residence of the film director Luchino Visconti, Villa Erba was conceived according to a mannerist-type inspiration, which gives it an immediately perceivable opulent nature. The villa extends over a square section, with wide stairways sloping down towards the lake from where to enjoy breathtaking views. Each room of the two-storey building is luxuriously decorated with multicolored frescoes. The Conference Centre is a masterpiece of creative design by Mario Bellini. The steel and glass structure is respectful of the ancient park, whose beauty is reflected in steel and glass sheets, and blends perfectly with the romantic landscape of Lake Como. The large lakeside park, endowed with private moorings and its own helipad, forms an integral part of the Conference Centre environment and offers a chance to relax during the conference breaks and take a delightful walk among the impressive century-old trees in the botanic gardens. Villa Erba is five to ten minutes from downtown Como and just 30 to 45 minutes from Milan and Malpensa international airport.



Organizing Association

IABMAS, International Association for Bridge Maintenance and Safety

Organizing Institution

POLIMI, Politecnico di Milano

Supporting Local Authorities *

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Provincia di Milano - Province of Milan, Italy

Provincia di Como - Province of Como, Italy

Comune di Como - Municipality of Como, Italy

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AICAP, Associazione Italiana Calcestruzzo Armato e Precompresso, Italy

AIOM, Associazione di Ingegneria Offshore e Marina, Italy

ACI, American Concrete Institute, USA

ASCE, American Society of Civil Engineers, USA

ASCP, The Portuguese Group of IABMAS, Portugal

ATLSS, Center for Advanced Technology for Large Structural Systems, USA

CERIC, Civil Engineering Research Information Center, Korea

COSEIK, Computational Structural Engineering Institute of Korea, Korea

CTE, Collegio dei Tecnici della Industrializzazione Edilizia, Italy

FHWA, Federal Highway Administration, US Dept. of Transportation, USA

IALCEE, International Association for Life-Cycle Civil Engineering

IASSAR, International Association for Structural Safety and Reliability

ISISE, Institute for Sustainability and Innovation in Structural Engrg., Portugal

JSMS, Japanese Society of Materials Science, Japan

JSCE, Japan Society of Civil Engineers, Japan

KAIST, Korea Advanced Institute of Science and Technology, Korea

KBRC, Korea Bridge Design & Engineering Research Center, Korea

KCI, Korean Concrete Institute, Korea

KSSC, Korean Society of Steel Construction, Korea

KU, Kansai University, Japan

RCEAS, P.C. Rossin College of Engineering and Applied Science, Lehigh University, USA

ReLUIS, Rete dei Laboratori Universitari di Ingegneria Sismica, Italy

Sapienza University of Rome, School of Engineering, Italy

SISTEC, Smart Infra-Structure Technology Center, Korea

SNU, Seoul National University, Korea

Tongji University, China

TRB, Transportation Research Board of the National Academies, USA

T.Y. Lin International, USA

UPC, Technical University of Catalonia, Spain

UM, University of Minho, Portugal

* As of February 28th, 2011.

In the front cover:

View of the Europa Bridge in Parma, Italy

Owner: Authority for Urban Transformation, Parma, Italy

Contractor: Impresa Pizzarotti & C. and Codelfa S.p.A., Italy

Architectural Design: Vittorio Guasti Architettura S.r.l., Parma, Italy

Structural Design: Pier Giorgio Malerba, Paolo Galli and Marco Di Domizio, Milan, Italy

Construction Engineering: Paolo Sorba A.Ierre P&L Engineering, Parma, Italy

Plants Design: Pool Engineering, Mareno di Piave, Treviso, Italy

Environmental Planning: Ambiter S.r.l., Parma, Italy

IABMAS 2012 Organizing Secretariat

Incentives e Congressi

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