

**UHPFRC 2017 – Tentative program**  
**Rev. August 24th, 2017**

Program at a glance

Sunday October 1 <sup>st</sup>	Monday October 2 <sup>nd</sup>	Tuesday October 3 <sup>rd</sup>	Wednesday October 4 <sup>th</sup>
	8:30 AM – 10:00 AM Registration	8:00 AM – 8:30 AM Registration	8:00 AM – 8:30 AM Registration
	8:30 AM – 10:00 AM Welcome coffee Opening of the exhibition	8:30 AM – 10:00 AM Parallel technical sessions	8:30 AM – 10:00 AM Parallel technical sessions
	10:00 AM – 1:00 PM Opening session and plenary lectures	10:00 AM – 10:30 AM Coffee break Visit of the exhibition	10:00 AM – 10:30 AM Coffee break Visit of the exhibition
		10:30 AM – 12:00 AM Parallel technical sessions	10:30 AM – 12:00 AM Parallel technical sessions
	1:00 PM – 2:30 PM Lunch	12:00 – 1:30 PM Lunch	12:00 – 1:30 PM Lunch
	2:30 PM – 4:00 PM Parallel technical sessions	1:30 PM – 2:50 PM Plenary session: introduction to technical visits	1:30 PM – 3:00 PM Parallel technical sessions
	4:00 PM – 4:30 PM Coffee break Visit of the exhibition	3:00 PM – 4:30 PM Visit of Pont de la République and « La Mantilla » building	3:15 PM – 5:00 PM Parallel technical sessions
4 :00 PM – 6 :30 PM Welcome of exhibitors	4:30 PM – 6:00 PM Parallel technical sessions	4:30 PM – 6:00 PM Visit of Montpellier new high speed railway station	5:00 PM – 5:15 PM Closure session
	6:30 PM – 7:30 PM Welcome cocktail (to be confirmed)	7:00 PM – 11:30 PM Conference Banquet Abbaye de Valmagne	

## Monday October 2 - 10:00 AM – 1:00 PM

### Opening session and plenary lectures

- 35 mn Welcome address from AFGC  
Bruno GODART, President of AFGC  
Encouragement address from RILEM  
Pascale DUCORNET, RILEM General Secretary  
Encouragement address from *fib*  
Marco DI PRISCO, convenor of the task group for *fib* MC revision on FRC / UHPFRC  
Encouragement address from ACI  
Ben GRAYBEAL, Chairman of ACI TC 239

Chairman: Jacques RESPLENDINO, to be confirmed

- 35 mn French experience of UHPFRC development from 2013: standards, breakthrough, UHPFRC solutions, fashion...  
François TOUTLEMONDE, Jacques RESPLENDINO, Sébastien BERNARDI, Ziad HAJAR
- 35 mn UHPFRC, a customized ready-to-install material: Luxury vs. common use of one of today's constructive materials  
Jean-Marc WEILL

Chairman: François TOUTLEMONDE

- 15 mn Malaysia, taking ultra-high performance concrete bridges to new dimensions  
Yen Lei VOO, Stephen J. FOSTER
- 15 mn Strengthening of existing structures using R-UHPFRC: principles and conceptual design  
Eugen BRÜHWILER
- 15 mn Emerging UHPC-based bridge construction and preservation solutions  
Benjamin A. GRAYBEAL
- 15 mn Experience with UHPFRC applications in the Czech Republic  
Milan KALNY, Jan KOMANEC, Vaclav KVASNICKA, Ctislav FIALA
- 15 mn Application of UHPC from pedestrian cable-stayed bridge to the first UHPC cable-stayed road bridge  
Byung-Suk KIM, Sung-Gul HONG, Sung Yong PARK, Changbin JOH, Gyoung-Taek KOH, Kihyon KWON, Jongbum PARK

## Monday October 2 - 2:30 PM – 4:00 PM

### Parallel technical sessions

Chairman: Benjamin A. GRAYBEAL

- 15 mn Memorial of Notre-Dame-de-Lorette  
Philippe PROST, Lucas MONSAINGEON, Jean-Marc WEILL, Raphaël FABBRI
- 15 mn The International Memorial of Notre Dame de Lorette: detailed design and realization  
Amélie BOUHOURS, Jérémie BURLLOT, Richard PETIT
- 15 mn A type of UHPC not quite up to standards  
Bendt K. AARUP
- 15 mn UHPC link slab solutions in North America  
Gaston DOIRON, Paul WHITE
- 15 mn Slender sunshades beams made of UHPFRC between two tunnels in Marseille  
Alain SIMON, Bruno DIMANCHE, Jacques RESPLENDINO
- 15 mn Thin-walled U-profile UHPFRC footbridge  
Jiří KOLISKO, David ČÍTEK, Petr TEJ, Milan RYDVAL

Chairman: Jörg JUNGWIRTH

- 15 mn Effect of steel fiber shape on pullout behavior of autoclaved UHPFRC with granite powder  
Tao JI, Xiaoling LIN, Yongning LIANG, Z. YANG, Baochun CHEN
- 15 mn Sensitivity of various steel-fiber types to compressive behavior of ultra-high performance fiber-reinforced concretes  
Duy Liem NGUYEN, Dong Joo KIM
- 15 mn Study of amorphous metallic fibers as alternative constituents in a referenced industrial UHPFRC mix: Conditions of optimized applications  
Augustin DUTHOIT, Patricia BREDY-TUFFE, Charlène BLIN, Lisa MICHEL
- 15 mn Design of a UHPFRC using amorphous metallic fibers  
Jean BERTRAND, Anaclet TURATSINZE, Ahmed TOUMI, Florian BERNARD
- 15 mn Influence of fibre content and aggregate size on the behaviour of ultra-high performance fibre-reinforced concrete during fire  
Martin SCHNEIDER, Jerneja KOLŠEK, Aljoša ŠAJNA
- 15 mn Effect of fibre orientation on the tensile strength of ultra-high performance steel fibre-reinforced self-compacting concrete  
Wilson R. LEAL DA SILVA, Oldrich SVEC, Lars N. THRANE, Claus PADE

## Monday October 2 - 4:30 PM – 6:00 PM

### Parallel technical sessions

Chairman: Steffen GRÜNEWALD, to be confirmed

- 15 mn Precast structural elements made of UHPC  
Jan L. VITEK, David ČITEK, Robert COUFAL
- 15 mn Complex architectural elements from HPFRC and 3D printed sandstone  
Nicolas RUFFRAY, Mathias BERNHARD, Andrei JIPA, Mania AGHAEI MEIBODI, Neil MONTAGUE DE TAISNE, Felix STUTZ, Timothy WANGLER, Robert FLATT, Benjamin DILLENBURGER
- 15 mn Sprayed UHPC with glass fibres for 3D panels  
Sébastien BERNARDI, Laurence TRUCY
- 15 mn Upgrading of existing bridge decks using UHPFRC densified by ettringite formation (AFT-UHPFRC): preliminary investigation  
Tohru MAKITA, Yuji WATANABE, Shuji YANAI, Toshimichi ICHINOMIYA
- 15 mn Numerical simulations and non-destructive measurements of fibre orientation on UHPFRC wind towers  
Fabrice TOUSSAINT, Hervé ROUCH, Svatopluk DOBRUSKY
- 15 mn Ultra-high performance shotcrete: yes we can!  
Laurence TRUCY, Svatopluk DOBRUSKY, Emmanuel BONNET

Chairman: Jean-Philippe CHARRON

- 15 mn Effect of ultra-high performance fibre-reinforced concrete and high-strength steel on the flexural behavior of reinforced concrete beams  
Yang LI, Corey GUERTIN-NORMOYLE, Omar ALGASSEM, Hassan AOUBE
- 15 mn Size effect of HPFRCC in uniaxial tension  
Giulio ZANI, Matteo COLOMBO, Marco DI PRISCO
- 15 mn Flexural quasi-static behaviour of UHPFRC circular slab specimens  
Xiujiang SHEN, Eugen BRÜHWILER
- 15 mn Correlation between the material tensile properties and the flexural response of UHPFRC panels  
Luis Felipe MAYA DUQUE, Benjamin A. GRAYBEAL
- 15 mn Seismic ductility of UHPFRC columns: some results  
Pierre MARCHAND, Florent BABY, Grégory GENEREUX, Alain SIMON, Wafae MAZIGHI, Jean-Paul DEVEAUD, Jean ERNULT, Philippe RIVILLON, François TOUTLEMONDE
- 15 mn UHPFRC direct shear characterization applied to web-flange shear design of T-shaped girders  
Amaury HERRERA, Florent BABY, Pierre MARCHAND, François TOUTLEMONDE

## Tuesday October 3 - 8:30 AM – 10:00 AM

### Parallel technical sessions

Chairman: Ekkehard FEHLING

- 15 mn Large-scale strength testing of Hexcrete segment designed with UHPC for tall wind turbine towers  
Robert PEGGAR, Sri SRITHARAN
- 15 mn Huaxin cement / UHPC Ductal® FM pre-tensioned beam  
Jean-Marc WEILL, Yanni ZHAO
- 15 mn The new strengthening method of hollow slab girder bridges by UHPC  
LIU Chao, JI He, WANG Junyan, LUO Peng
- 15 mn Adhesion of a UHPFRC cover to a regular concrete as protection for marine structures  
Stéphanie VILDAER, Christian CREMONA
- 15 mn Ice shield for offshore structures  
Mohamed A. HAMED, Amgad HUSSEIN, Hesham MARZOUK
- 15 mn Innovative rehabilitation technology for corrugated metal pipe culverts using wet-mix sprayed UHPFRC  
Alain HUYNH, Bertrand PETIT, François TEPLY, Catherine LARIVE

Chairman: Ziad HAJAR

- 15 mn Three-dimensional Finite Element modeling of UHPC using total strain crack models  
Negar NAEIMI, Mohamed A. MOUSTAFA
- 15 mn Probabilistic numerical model of ultra-high performance fibre-reinforced concrete (UHPFRC) cracking process  
Pierre ROSSI, Dominic DAVIAU-DESNOYERS, Jean-Louis TAILHAN
- 15 mn A numerical model to determine the characteristic length of UHPFRC beams  
Philipp HADL, Nguyen-Viet TUE
- 15 mn Finite Element analysis of UHPFRC plates under impact loads  
Hesham OTHMAN, Hesham MARZOUK
- 15 mn Experimental studies and numerical analysis on the flexural behavior of reinforced UHPC beams  
Jia-Zhan SU, Baochun CHEN, Qing-Wei HUANG
- 15 mn Finite Element analysis on pull-out behavior of post-installed adhesive anchor filled with UHPFRC  
Ayumi SATOH, Yuki SAKAGAMI, Shun MITARAI

Tuesday October 3 - 10:30 AM – 12:00 AM

Parallel technical sessions

Chairman: Bruno MASSICOTTE, to be confirmed

- 15 mn UHPFRC Footbridge in le Cannet des Maures  
Frédéric PASTOR, Ziad HAJAR, Patrick DAL PALU
- 15 mn Design, installation and long term monitoring of UHPC footbridge over Opatovický Channel  
David ČÍTEK, Bohuslav SLÁNSKY, Jíří KOLISKO, Stanislav REHAČEK, Petr HUNKA
- 15 mn Buthaumont Bridge on the Orne river in Boncourt  
Ziad HAJAR, Frédéric PASTOR, Ludovic PICARD, Damien CHAMPENOY, Laurent LOUTTE
- 15 mn A UHPC overlay for deteriorated bridge decks  
Sri SRITHARAN, Gaston DOIRON, Dean BIERWAGEN, Brian KEIERLEBER, Ahmad ABU-HAWASH
- 15 mn New UHPFRC deck slab for the Grand Pont in Thouaré-sur-Loire (France) – How to extend the life of a 19th century metallic structure bridge  
Serge JAFFRELO
- 15 mn Case study of two accelerated bridge construction projects in the U.S. using prefabricated bridge elements connected with UHPFRC  
Gregory J. NAULT

Chairman: Sébastien BERNARDI, to be confirmed

- 15 mn Experimental study on properties of ultra-high strength fiber-reinforced concrete containing ordinary Portland cement and blast furnace slag with various fineness  
Oudomsak SIPHAVANH, Hiromi FUJIWARA, Masanori MARUOKA, Shuichi FUJIKURA
- 15 mn Possibilities for improving the properties of UHPC by means of thermal treatment  
Christian SELLENG, Sebastian SIMON, Patrick FONTANA, Birgit MENG
- 15 mn Mechanical properties of fiber reinforced pore free concrete with high strength matrix above 400 MPa  
Ryohei YANAGIDA, Takuro NAKAMURA, Katsuya KONO, Junichiro NIWA
- 15 mn Characterization of low cost UHPFRC for structural applications  
Thierry VIDAL, Elsa NGUYEN PHUONG AMANJEAN
- 15 mn Mechanical and durability properties of environmentally friendly ultra-high performance concrete (UHPC)  
Omar M. ABDULKAREEM, Amor BEN FRAJ, Marwen BOUASKER, Abdelhafid KHELIDJ
- 15 mn Early-age shrinkage development of ultra-high performance concrete under heat curing treatment  
Wengui LI, Zhengyu HUANG, Zhiyu LUO, Wen Hui DUAN, Surendra P. SHAH

Tuesday October 3 - 1:30 PM – 2:50 PM

Plenary session: introduction to technical visits

Chairman: Eugen BRÜHWILER

- 20 mn La République Bridge in Montpellier  
Romain RICCIOTTI, Frédéric PASTOR, Ziad HAJAR, Sébastien BERNARDI
- 20 mn Architectonic UHPFRC elements in BSI®  
Amélie BOUHOURS, Jérémie BURLLOT, Sandrine CHANUT
- 40 mn Roofing of Montpellier – South of France TGV Station  
Marc MIMRAM, Michèle BONERA, Grégory BARRAU, Patrick MAZZACANE

Wednesday October 4 - 8:30 AM – 10:00 AM

Parallel technical sessions

Chairman: Milan KALNY

- 15 mn The German Guideline for ultra-high performance concrete  
Michael SCHMIDT, Torsten LEUTBECHER, Siemon PIOTROWSKI, Udo WIENS
- 15 mn Standardization of Ultra-High Performance Concrete - The Canadian Perspective  
Vic PERRY, Katrin HABEL
- 15 mn Advances in the development of the first UHPFRC Recommendations in Spain: Material classification, design and characterization  
Juan Ángel LÓPEZ, Pedro SERNA, Juan NAVARRO-GREGORI
- 15 mn Reliability-based calibration of partial factor for thin non-structural elements made of UHPFRC  
Svatopluk DOBRUSKY, Sébastien BERNARDI, Seddik SAKJI
- 15 mn New semi-probabilistic design method for non-structural elements made of UHPFRC  
Sébastien BERNARDI, Vibhu MALIK, Svatopluk DOBRUSKY, Gilles CHANVILLARD†, Seddik SAKJI
- 15 mn Designing UHPFRC structures with organic fibres  
Raphaël FABBRI, Sébastien BERNARDI

Chairman: Junichiro NIWA

- 15 mn Effect of specimen size on the compressive strength of ultra-high performance concrete  
Philipp RIEDEL, Torsten LEUTBECHER
- 15 mn UHPC in extreme conditions and temperature loading  
Milan RYDVAL, David ČÍTEK, Jíří KOLISKO
- 15 mn Development of impact resistant UHPFRC  
Marios SOUTSOS, Desmond ROBINSON, Jian-Fei CHEN
- 15 mn Fatigue behavior of ultra-high performance concrete (UHPC) under compressive loading  
Nouffou TAPSOBA, David ČÍTEK, Svatopluk DOBRUSKY, Jíří KOLISKO
- 15 mn Accelerated Chloride migration tests of UHPFRC  
Juliano P. VINCLER, David CONCIATORI, Luca SORELLI, Dominique CORVEZ
- 15 mn Characterization of the tensile response of strain hardening UHPFRC – Chillon Viaducts  
Emmanuel DENARIE, Lionel SOFIA, Eugen BRÜHWILER

### Wednesday October 4 - 10:30 AM – 12:00 AM

#### Parallel technical sessions

Chairman: Sri SRITHARAN

- 15 mn Smart building components – UHPC mullions  
Andrew PINNEKE, Kelly A. HENRY, Dominique CORVEZ
- 15 mn Design and production of UHPFRC raised floor tiles  
Philippe MARY, Guillaume ROUX, Jérôme FRECON
- 15 mn Columns and ornamental vertical elements made with UHPFRC for the Saint-Nazaire aquatic center  
Amélie BOUHOURS, Jérémie BURLLOT, Jérémie BAUMGARTNER
- 15 mn The Ductal® rainscreen cladding solution in Europe  
Laura FERNANDEZ
- 15 mn The Miles Stair in Somerset House  
Raphaël FABBRI, Eva JIRICNA, Cinzia PALAZZETTI, Matthew WELLS
- 15 mn Industrial production of thin rainscreen cladding in UHPC  
Kelly A. HENRY, Craig W. HEANEY

Chairman: Antoine NAAMAN

- 15 mn Uni-axial tensile tests for UHPFRC  
Svatopluk DOBRUSKY, Sébastien BERNARDI
- 15 mn The optimized design of dog-bones for tensile test of ultra-high performance concrete  
Jian YANG, Jiazhan SU, Baochun CHEN, Xia LUO, Xiujiang SHEN
- 15 mn An analytical approach to derive constitutive laws from bending tests without using FE-simulation  
Philipp HADL, Nguyen-Viet TUE
- 15 mn Inverse analysis tailored for both strain hardening and strain softening UHPFRC  
Svatopluk DOBRUSKY
- 15 mn Derivation of constitutive law for UHPFRC using DIC system  
Tamás MÉSZÖLI, Norbert RANDL
- 15 mn Identification of the tensile law of UHPFRC materials from bending tests by means of digital image correlation  
Youri DUHAMEL-LABRECQUE, Luca SORELLI, Julien RETHORE, Florent BABY, François TOUTLEMONDE, Sébastien BERNARDI

### Wednesday October 4 - 1:30 PM – 3:00 PM

#### Parallel technical sessions

Chairman: Pedro SERNA

- 15 mn An innovative approach of using UHPC for metro viaducts  
Serge MONTENS, Jérôme OLIVE, Pierre-Etienne GAUTIER, Sébastien BERNARDI
- 15 mn Super long-span longitudinal prestressed UHPC box-girder bridge  
Minghong QIU, Xudong SHAO, Hua ZHAO, Rensheng PAN, Gang CHEN
- 15 mn New systems of precast bridge decks made with ultra-high performance fibre-reinforced concrete  
Jean-Philippe CHARRON, Sébastien VERGER-LEBŒUF, Frédéric LACHANCE, Bruno MASSICOTTE
- 15 mn Seismic design and performance of ultra-high performance concrete bridge bents  
Mohamed A. MOUSTAFA, Christopher D. JOE, Keri L. RYAN
- 15 mn Fully precast light-weight steel-UHPC composite structure for accelerated bridge construction  
Shu-Wen DENG, Xu-Dong SHAO, Ban-Fu YAN, Hui-Hui LI
- 15 mn Slender UHPFRC pre-stressed girders for mid-span bridges and park decks; conceptual design and modelling of the structural behaviour  
Jörg JUNGWIRTH, Jakob ENGEL, Amine KOUBAA, Nicholas SCHRAMM, Oliver FISCHER

Chairman: Luca SORELLI

- 15 mn Impact resistance performance of UHPFRC panels under low velocity impact loading  
Hiroyuki MUSHA, Masuhiro BEPPU
- 15 mn Impact resistance of UHPFRC plates  
Hesham OTHMAN, Hesham MARZOUK
- 15 mn Effect of ultra-high performance fibre-reinforced concrete on the blast performance of reinforced concrete beams  
Hassan AOUBE, Yang LI, Corey GUERTIN-NORMOYLE, Omar ALGASSEM
- 15 mn Exploring UHPFRC possibilities  
Raphaël FABBRI, Mattia Federico LEONE, Jenine PRINCIPE
- 15 mn Experimental study of ultra-high performance mortar masonry short columns under axial loads  
Cong LI, Baochun CHEN, Jia-Zhan SU, Miaoxing LIAO
- 15 mn Creep behavior of composite Glulam-UHPFRC beams connected by bonding  
Kanhchana KONG, Emmanuel FERRIER, Laurent MICHEL

### Wednesday October 4 - 3:15 PM – 5:00 PM

#### Parallel technical sessions

Chairman: Pierre MARCHAND

- 15 mn Non-prestressed bridge deck-girder composite with end-girder continuity detail using ultra-high performance concrete (UHPC) within the end connection  
Saipavan RALLABHANDHI, John J. MYERS
- 15 mn Turnkey projects of ultra-high performance fibre-reinforced concrete (UHPFRC) footbridges  
Esteban CAMACHO, Hugo COLL, Juan Ángel LÓPEZ, Fernando GALÁN
- 15 mn UHPC pier repair/retrofit: Examples of completed projects in North America  
Gaston DOIRON
- 15 mn Hammersmith Flyover: a complete innovative renovation  
Boris COUSIN, Vanessa BUCHIN-ROULIE, Christophe VANDEVOORDE, Nicolas FABRY
- 15 mn Shum Yip Upperhills UHPC façade panels: Analysis of the design process  
Philips VERNON, Michael KU, Jean-Marc WEILL, Yanni ZHAO
- 15 mn La Marseillaise Tower  
Didier BRAULT, Pascal PINET
- 15 mn Research and application of the composite deck system composed of orthotropic steel deck and thin UHPFRC layer  
Cheng LIU, Wenhao PAN, Jiansheng FAN, Jianguo NIE, Jianhua HU, Jianfeng CUI

Chairman: Baochun CHEN

- 15 mn Experimental research on the interfacial properties of non-steam-cured UHPC-Steel composite beam  
Zhe WANG, Jiansheng FAN, Qili SUN, Cheng LIU
- 15 mn Interface shear transfer between precast UHPFRC elements and normal concrete overlay  
Norbert RANDL, Martin STEINER, Tamás MÉSZÖLI
- 15 mn Experimental research on the behaviour of short headed stud in non-steam-cured UHPC under tensile and shear load  
Qili SUN, Jiansheng FAN, Xinying LU, Zhe WANG
- 15 mn Behaviour of headed shear stud connectors in composite beams with UHPFRC connection  
Maxime GASCON, Bruno MASSICOTTE, Fabien LAGIER
- 15 mn Shear strengthening method for RC beams by using post-tensioned UHPC panel  
Takuro NAKAMURA, Pornpen LIMPANINLACHAT, Katsuya KONO, Junichiro NIWA
- 15 mn Circular UHPC-NSC composite columns under concentric loading  
Goran VOJVODIC, Philipp HADL, Nguyen Duc TUNG, Nguyen-Viet TUE
- 15 mn Test on circular steel tube confined UHPC and UHPFRC columns under axial loading  
LE Hoang An, Ekkehard FEHLING

### Wednesday October 4 – 5:00 PM – 5:15 PM

#### Closure session

- 15 mn Closing address, thanks and prospective  
François TOUTLEMONDE, Jacques RESPLENDINO