# UHPFRC 2017 – Tentative program  
**Rev. August 28th, 2017**

## Program at a glance

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<td>Coffee break</td>
<td>Visit of Pont de la République and « La Mantilla » building</td>
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<td>Welcome of exhibitors</td>
<td>Parallel technical sessions</td>
<td>Visit of Montpellier new high speed railway station</td>
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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
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 BOHOURS, Jérémie BURLOT, 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
Jíří 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, Baocun 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, Charléne BLIN, Lisa MICHEL
15 mn  Design of a UHPFRC using amorphous metallic fibers
Jean BERTRAND, AnacleT TURATSIINZE, 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, Nei MONTAGUE DE TAISSIE, 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

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 AOUD
15 mn Size effect of HPF RCC 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 ERLNULT, 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. MOUSTAF A
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 Opatovicky Channel
David ČÍTEK, Bohuslav SLÁNSKY, Jiří KOLISKO, Stanislav REHAČEK, Petr HUNKA
15 mn Buthaumont Bridge on the Orne river in Boncourt
Ziad HAJAR, Frédéric PASTOR, Ludovic PICARD, Damien CHAMPENOUX, 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, Abdelfatif 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 BURLOT, 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 ČIŠEK, Jiří 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
Noufou TAPSOBA, David ČIŠEK, Svatošuk DOBRUSKY, Jiří 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 BURLOT, 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
Svatošuk DOBRUSKY, Sébastien BERNARDI
15 mn The optimized design of dog-bones for tensile test of ultra-high performance concrete
Jian YANG, Jiazhao 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
Svatošuk 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 TOULTEMONDE, 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 QU, Xudong SHAO, Hua ZHAO, Renshang PAN, Gang CHEN
15 mn New systems of precast bridge decks made with ultra-high performance fibre-reinforced concrete
Jean-Philippe CHARRON, Sébastien VERGER-LEBEUF, 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 AOUDE, 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 LOPEZ, 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 UHPC 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 UFC panel
Takuro NAKAMURA, Pompen 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