SUNDAY 15 JUNE 2025

17:30-19:00	*Registration desk*
19:00-20:30	**19:00 – 20:30 : Palais des Congrès Antibes Juan les Pins – Méditerranée Space** **Welcome Reception (included in registration fees)**

Detailed technical program

MONDAY 16 JUNE 2025

8:00-9:00	*Registration desk & Coffee (Méditerranée Space)*
	Amphitheater Antipolis
9:00-11:00	**Opening ceremony** ***Welcome from conference chairs, official address from Antibes mayor,*** ***fib president address, fib fellows 2025 presentation, fib Medal Recipients 2025, fib Honorary Member 2025*** **AAYE ceremony including a tribute to Jean Muller by Claude Le Quéré, AFGC President**
11:00-11:30	*Coffee break & Exhibition (Gould Space)*
11:30-12:30	**Keynotes – Session Chair Iria Doniak, *fib* President**
11:30-12:00	**Keynote 1 - VN Heggade: Design and Construction of Bridges in India: lessons for practice to safe design**
12:00-12:30	**Keynote 2 - Kefei Li: Sulfate attack on structural concretes: from microscopic mechanisms to engineering modeling**
12:30-14:00	*Lunch (Gould Space)*
14:00-15:15	**Parallel Session 1**

	Amphitheater Antipolis	Ella Fitzgerald Room	Miles Davis Room	Louis Armonstrong Room	Gould 1 Room	Sydney Bechet Room	Gould 2 Room
	SPECIAL SESSION 26 (1/3) **Climate-friendly Transition of the Concrete Construction Industry: Challenges and Possibilities** **Chairs Norbert Randl & Giuliana Somma**	**SPECIAL SESSION 5** **Probabilistic Reliability Assessment of Existing Concrete Structures in Engineering Practice** **Chair Miroslav Sykora**	**SPECIAL SESSION 4** **Pre-fabricated shallow floors** **Chair Wit Derkowski**	**SPECIAL SESSION 7** **Material-appropriate construction with carbon-reinforced concrete** **Chairs Steffen Marx**	**Parallel Session 1a** **Numerical modelling** **Chair Walter Kaufmann**	**Parallel Session 1b** **Monitoring (1/2)** **Chair Toshiaki Mizobuchi**	**Parallel Session 1c** **Prestressing** **Chair Tor Ole Olsen**
14:00-14:15	**Rice Husk Ash: is it a good substitute for cement in concrete?** Giuliana Somma, E Runcio	**Structural Assessment of Prestressed Bridge Half-Joint Zones Using Global Safety Format and Continuous Monitoring** Dario La Mazza, Gianni Croce, Paola Darò, Lavinia Coraci, Giuseppe Mancini	**Prefabricated shallow floors : history, present and future** Jan Bujnak, Simo Peltonen	**A novel technique using EBR Side Extended (EBRSE) to delay FRP laminate debonding in strengthened concrete structures** Mehdi Aghabagloo, Laura Carreras, Cristina Barris, Alba Codina, Marta Baena	**Training and Integrating a Machine-Learning-Based Shell Element in Reinforced Concrete Simulations** Vera Balmer, Michael Anton Kraus, Stelian Coros, Walter Kaufmann	**Data-based bridge maintenance Transforming bridge inspections to performance monitoring** Hitoshi Ito, Toshiaki Mizobuchi	**Bond behavior of prestressing strands with large strand diameters in pretensioned concrete** Dominik Wrona, Annkathrin Sinning, Martin Claßen
14:15-14:30	**New cements: a look at the future of the construction sector for an ecological transition** Edoardo Runcio, Giuliana Somma	**Comparison of approaches for determining global safety factors in NLNA of RC members failing in shear** Diego Gino	**Shear resistance of prestressed hollow core slabs in shallow floors** Matti Pajari	**Automated Robotic Deposition of Material-Appropriate Reinforcement Structures Inspired by Peltate Leaf Fibers** Yue Zheng Wen, Annabell Rjosk, Danny Friese, Florian Schmidt, Johannes Mersch, Christoph Neinhuis, Thea Lautenschläger, Chokri Cherif	**The effect of loading and support condition on the shear resistance of reinforced concrete beams with low shear reinforcement ratio** Yasar Hanifi Gedik, Nima Kian, Nguyen Duc Tung	**Rupture of external prestressing tendons injected with cement grout. New monitoring method from the measure of their deformations** Nicolas Bessoule, Christophe Carde, Bernard Tonnoir, Michel Virlogeux, Ivica Zivanovic	**Experimental evaluation of the prestressing force transmission length in the beam constructed from lightweight aggregate concrete, pretensioned with steel prestressing strand of 15.7 mm diameter** Łukasz Ślaga, Andrzej Seruga
14:30-14:45	**Finding carbon and cost efficiencies in the design of RC slabs made from high early strength concrete** Daniel Snodgrass, David Ruggiero	**Investigating the calibration potential of load partial factors in the fib Model Code** Ramon Hingorani, Jochen Köhler, Miroslav Sykora	**Behaviour of shallow floors in fire situation** Mikko Malaska, Salla-Mari West	**Crack analysis in an in-situ micro-tomography tension test of a carbon-reinforced specimen** Frank Liebold, Tobias Neef, Bindusara Nagathihalli Lokesh, Tobias Fritsch, Giovanni Bruno, Viktor Mechtcherine, Hans-Gerd Maas	**Numerical modelling of out-of-plane buckling of reinforced concrete walls under monotonic loading** Nathan Deleschaux, David Ruggiero	**Case study for massive monitoring data analysis on concrete port infrastructures** Pierre Leflour, Jorge Semiao, Patrick Lézin, Mahdi KHADRA, François-Baptiste Cartiaux	**Experimental evaluation of the steel prestressing strand development length in the beam constructed from lightweight aggregate concrete** Łukasz Ślaga, Andrzej Seruga, Marcin Midro
14:45-15:00	**Sustainable reinforced concrete slab design: Integrating 3D topology optimization and environmental impact reduction** Ahmad Majdouba, David Ruggiero	**Understanding existing barriers to consistent decision making on reuse** Peter Tanner, Carlos Lara, David Sanz	**Steel-concrete shear connection in composite structures: a key structural component for shallow floors** Jean-François Demonceau, Oliver Beckmann, Simo Peltonen	**Modeling dowel action in carbon reinforced concrete with CFRP grids** Eduarda Dilkin, Sven Bosbach, Martin Classen	**Unified Finite Element Limit Analysis for reinforced concrete** Peter Noe Poulsen, John Forbes Olesen	**New concept for sensor-based bridge inspections** Alois Vorwagner, Vazul Boros, Maciej Kwapisz, Lienhart Werner, Dominik Prammer	**Internal forces in the anchorage zone reinforcement – analytical models vs measurements** Hugo Raymond, Sylwia Schoenowitz-Zuradzka, Piotr Gwozdziewicz
15:00-15:15	**Sustainability-centred decision-making for interventions on existing concrete bridges** Brian Brongers, Agnieszka Bigaj-van Vliet	**Probabilistic Assessment of Cooling Towers Under Carbonation-Induced Corrosion Using a Categorical Boosting Machine Learning Model** Lenganji Simwanda, Miroslav Sykora	**Extending the Lifespan of Building Structures and Reducing its Environmental Impact** Ronald Klein-Holte	**Influence of transversal rovings' spacing on the bond behaviour of chemically-prestressed carbon-textile reinforced concrete plates** Mohammed Dhahir	**Analysis and simulation with a CFD tool of self-compacting concrete with crushed wind turbine blade** Manuel Hernando-Revenga, Víctor Revilla-Cuesta, Javier Manso-Morato, Flora Faleschini, José T. San-José, Vanesa Ortega-López	**Evaluation of damage in concrete bridges through non-modal dynamic parameters** Abdou Dia, Tuyen Viet Nguyen, Nisrine Makhoul	**Finite element modelling of post-tensioned beams with grout injection defects** Marialorenza Vescovi, Daniele Ferretti, Beatrice Belletti

15:15-15:45	***Coffee break & Exhibition (Gould Space)***						
15:45-17:00	**Parallel Session 2**						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 26 (2/3) **Climate-friendly Transition of the Concrete Construction Industry: Challenges and Possibilities** **Chairs Norbert Randl & Giuliana Somma**	**SPECIAL SESSION 23** **Performance-based approach to the durability of concrete structures: Main results of the French PerfDub project** **Chairs Gilles Escadeillas, François Cussigh & Bruno Godart**	**SPECIAL SESSION 8 (1/2)** **Material components and manufacturing techniques for non-metallic reinforced concrete** **Chair Rostislav Chudoba**	**SPECIAL SESSION 11** **Robustness assessment of structures and infrastructures** **Chairs Beatrice Belletti, Simone Ravasini, Robby Caspeele & Fulvio Parisi**		**Parallel Session 2a** **Probabilistic analysis -** **Chair Avraham Dancygier**	**Parallel Session 2b** **GFRP** **Chair Giovanni Plizzari**
15:45-16:00	**Durability aspects in the evaluation of carbon footprint in low-rise and high-rise buildings** Alessandro P. Fantilli, Zahra Rajabi, Fabrizio Demaria, Fulvio Canonico	**Context and introduction of the PERFDUB project, François** Cussigh, Gilles Escadeillas, Didier Brazillier	**Biaxial tensile tests on carbon-reinforced concrete** Jonathan Schmidt, Maximilian Weiß, Iurie Curosu, Birgit Beckmann, Steffen Marx, Manfred Curbach	**Reliability evaluation of the robustness of reinforced concrete frames considering different failure scenarios** Elena Miceli, Diego Gino, Paolo Castaldo		**Probabilistic analysis of corrosion-induced cover delamination in reinforced concrete structures** Andreas Dekeyser, Els Verstrynge, Roman Wan-Wendner, Wouter Botte, Robby Caspeele	**Detailed evaluation of GFRP mesh mechanical properties for better structural integrity** Elhem Ghorbel, Gláucia Dalfré, Amanda Mazzú
16:00-16:15	**Sustainable recycling of non-hazardous construction and demolition waste in self-compacting concrete for construction** Haruna Ibrahim, Elhem Ghorbel, Zahid Alfi Mohammad, Obaidurrahman SAFI, George Wardeh	**Evaluation of concrete performance: from improving existing durability tests to the definition of new protocols** Emmanuel Rozière, Philippe Turcry, Franck Cassagnabere, Philippe Fonollosa	**Combined impregnation and straightening of woven basalt textile reinforcement for cement composites: flexural behaviour** Gilles Vandereecken, Tine Tysmans	**Nonlinear Response and Structural Robustness of RC Framed Buildings to Differential Soil Settlements** Federica Rauseo, Fulvio Parisi		**A Modified Model to Quantify Cracking Localization in Beams** Yuri Karinski, Avraham Dancygier	**Mechanical and environmental behaviour of concrete beams with hybrid GFRP and steel reinforcement** José J. Ortega, Lucía Garijo, Adriano Reggia, Giovanni Plizzari
16:15-16:30	**A framework for the preliminary design of structures and structural interventions taking into account the environmental performance** Edoardo Rossi, Giorgio Mattarollo, Tamás Mészöly, Norbert Randl	**Analysis of data obtained on existing structures during the PerfDub project** Bruno Godart, Michael Dierkens	**A Novel Manufacturing Process for Precise Honeycomb Shaping of Extruded Carbon-Reinforced Concrete Elements** Christian Bertram, Jakob Beckers, Olivier Reinertz, Cynthia Morales Cruz, Thomas Matschei, Katharina Schmitz	**Numerical study on settlement-induced damage to RC frames: the effect of foundations and ground stiffness** Belletti Beatrice, Elena Michelini, Sławomir Dudziak, Mauro Pappalardo, Simone Ravasini	**Session Young Members Group (1/2)**	**Examining Bridge Pile Damage Probability in Liquefiable and Non-liquefiable Ground** Golshid Shid, Ali Noorzad	**Investigations on the Bending Behavior of High Performance Aerogel Concrete with GFRP Reinforcement** Torsten Welsch, Martina Schnellenbach-Held
16:30-16:45	**Comparative study on tensile behavior of textile reinforced concrete with short steel and basalt fibres** Giorgio Mattarollo, Daniel Gergov, Norbert Randl, Tamás Mészöly, Edoardo Rossi	**PerfDub project - Data Base on concretes and its exploitation** Jonathan Mai-Nhu, François Cussigh, Philippe Turcry, Emmanuel Roziere, Michael Dierkens, Gabriel Pham, François Toutlemonde, Patrick Rougeau	**Material-Minimised Carbon Reinforced Concrete for Multi-dimensional Tessellations in Building Applications** Linda Debora Cortes Satizabal, Sascha Stüttgen, Meike Weiß, Kira Heins, Alice C. Niemeyer, Daniel Robertz, Thomas Gries	**The influence of nonlinear modeling on robustness quantification: a case study of bridges** Matteo Colombo, Paolo Martinelli, Pedro Jose Verbel Arroyo		**Dynamic Simulation of Concrete Structures Using an Extended RBSM Considering Large Rotation and Fragment Collision** Kimura Kanto, Yamamoto Yoshihito	**Mechanical and microstructural characterization of straight and bent thermoplastic GFRP reinforcing bars** Maha Fodda, Sylvain Chataigner, Ludwig Battais, Benjamin Terrade, Marc Quiertant, Arnaud Rolland, Karim Benzarti
16:45-17:00	**Life Cycle Assessment and Structural Design of Low Carbon Concrete Beams Containing High Percentages of Recycled Materials** Buddhi Daraniyagala Arachchilage, Tsz Yeung Tsang, Liam Butler	**PerfDub project – Definition of performance thresholds according to exposure classes and methodology** Myriam Carcasses	**Flexibility and Precision: Manufacturing concept for folded tessellated lightweight carbon-reinforced concrete slabs** Carlos G Gomes, Christian Bertram, Olivier Reinertz, Katharina Schmitz, Rostislav Chudoba	**Robustness Assessment of an Existing RC Frame Building Subjected to Differential Settlements using NLFEA** Elena Michelini, Sławomir Dudziak, Beatrice Belletti, Simone Ravasini			**Investigation of the bond behaviour of non-metallic reinforcing bars in low-clinker concretes** Paul Heber, Oliver Sikorski, Amer Suliman, Paul-Martin Großkopff, Birgit Beckmann, Steffen Marx

17:00-18:15	Parallel Session 3						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 26 (3/3) **Climate-friendly Transition of the Concrete Construction Industry: Challenges and Possibilities** **Chairs Norbert Randl & Giuliana Somma**	**SPECIAL SESSION 12** **On-going durability and corrosion studies on the specimens from the PN PERFDUB project** **Chair Véronique Bouteiller**	**SPECIAL SESSION 8 (2/2)** **Material components and manufacturing techniques for non-metallic reinforced concrete** **Chair Mohammed Dhahir**	**SPECIAL SESSION 13** **Advanced monitoring techniques for concrete structures** **Chairs Numa Bertola & Alfred Strauss**	**Session Young Members Group (1/2)**	**Parallel Session 3a** **Structural design (1/4)** **Chair Hugo Corres**	**Parallel Session 3b** **Innovative materials** **Chair Gyorgy Balazs**
17:00-17:15	**Experimental investigations to identify challenges in design of prefabricated concrete structures for disassembly and reuse** Ramon Hingorani, Tore Myrland Jensen, Petra Rüther, Vegard Alme Ulstein	**On-going durability and corrosion studies on the metric specimens cast as part of the PN PerfDuB and exposed to natural ageing sites** François Cussigh , Véronique Bouteiller , Jonathan Mai-Nhu, Philippe Turcry, Elisabeth Marie-Victoire	**Tensile tests of recycled carbon fibers for carbon-reinforced concrete applications** Enrico Baumgärtel, Md Sazzadur Rahman, Marcel Zeisberg, Jens Bachmann, Philipp Karsten Niebel, Birgit Beckmann, Steffen Marx	**Distributed Humidity Sensing for concrete structures** Johannes Wimmer, Stefan Küttenbaum, Thomas Braml		**Holistic Sustainability Analysis of Wrapped Textile-Reinforced Concrete Using the Example of a Pump Sump** Fabian Kufner, Yannick Göttler, Petra Rucker-Gramm, Michael Horstmann	**Investigation of electric curing effect of potassium activated fly ash and slag based geopolymer mortars** Mazem Yılmaz, Mücteba Uysal
17:15-17:30	**A framework for quantifying the benefits of robot-assisted deconstruction and reuse of structural concrete components** Ramon Hingorani, Katarzyna Ostapska, Klodian Gradeci, Petra Rüther	**Durability performance of several concrete compositions including low carbon footprint concretes** Jonathan Mai-Nhu, Philippe Turcry, Véronique Bouteiller, Elisabeth Marie-Victoire, Pauline Barthelemy, Myriam Bouichou, François Cussigh	**Low carbon footprint textiles for concrete reinforcement** Alva Peled, Adan Wattad, Rotem Haik	**Concrete bridge monitoring through spatially distributed fibre optic sensing** Numa Bertola, Francesco Fabbricatore		**Experimental study on anchorage performance of a new fastening system for wood-frame façade connected to a concrete structure** Alice Le Berder, Hugues Somja, Tuan-Anh Nguyen, Van Han Tran, Clémence Nicollet	**Limits and impacts of non-hazardous building demolition waste on mortar microstructure and mechanical properties** Annelise Cousture, Haruna Ibrahim, Obaidurrahman Safi, Elhem Ghorbel
17:30-17:45	**A Performance-based Framework for Selecting Sustainable Concrete Solutions in Chloride-Exposed Environments** Fabrizio Moro, Sylvia Kessler	**3-year exposition of PerfDuB specimens on a tidal zone: comparison between model predictions and experimental results** Philippe Turcry, François Cussigh, Véronique Bouteiller, Elisabeth Marie-Victoire, Myriam Bouichou, Jean Ducasse-Lapeyrusse, Jonathan Mai-Nhu, Sandrine Chanut, Amandine Bonnet, Victor Da-Silva	**Interphases with layered organic/inorganic structures for increased toughness of carbon fiber reinforced concrete composites** Toni Utech, Tobias Neef, Lissy Flechsig, Viktor Mechtcherine, Christina Scheffler,	**Deep learning model for automated damage detection of con-crete bridges** Ali Siddique, Vittorio Prodomo, Alfredo Valerij Laino, Antonio Bilotta		**Crack Development in Looped Wire Rope Connections** Torkil Veyhe, Søren G. Hansen, Henrik B. Jørgensen	**Evaluating model errors using EC2 to design alkali-activated reinforced concrete beams** Daniele Ferretti, Erica Lenticchia, Marialorenza Vescovi
17:45-18:00	**Carbonation Resistance of Low-Carbon Concrete Incorporating Limestone Filler and Ultrafine Cementitious Materials** Mouna Boumaaza, Thomas Holder, François Cussigh, Lionel Linger	**3-years results on the corrosion of PerfDuB specimens exposed to chlorides on natural ageing site** Elisabeth Marie-Victoire, Myriam Bouichou, Jean Ducasse-Lapeyrusse, Véronique Bouteiller, Amandine Bonnet, Victor Da-Silva, Philippe Turcry, Jonathan Mai-Nhu, Pauline Barthelemy, François Cussigh, Sandrine Chanut	**Electrochemical recovery of carbon fibres by acetic acid under mild conditions** Stefan Röher, Julius Scheel, Alexandra Apel, Marco Liebscher, Inez Weidinger	**Analyses of a structural health monitoring system on bridges through AI approaches** Antonio Bilotta, Ivan Di Cristinzi, Andrea Pollastro, Maria Rosaria Pecce		**Development of Reinforcement Structure in RC Segment Joints for Shield Tunnels under High Axial Force Conditions** Akinori Sato, Takahisa Fukushima, Yuma Okuyama, Nishiyama Yoshiki, Kaoru Matsuoka, Ryouichi Shimizu, Kazuhiro Kobayashi	**Carbonated water and MgO for improved performance of 3D concrete printing** Pathmanathan Rajeev, Kirushnapillai Kopitha, Jay Sanjayan
18:00-18:15	**Design and construction of FRC tunnel precast segment with fibre enabled carbon footprint reduction** Benoit De Rivaz	**3-year results on the corrosion of PerfDuB specimens exposed to carbonation on natural ageing sites** Véronique Bouteiller, Amandine Bonnet, Victor Da-Silva, Elisabeth Marie-Victoire, Myriam Bouichou, Jean Ducasse-Lapeyrusse, Philippe Turcry, Jonathan Mai-Nhu, François Cussigh, Sandrine Chanut	**Impact of clay mineralogy on the rheological behavior of carbon reinforced concrete with sustainable binders** Silvia Reißig, Michael Wenzel, Selina Vaculik, Tobias Neef, Cynthia Moralez-Cruz, Antonia Etscher, Thomas Matschei, Viktor Mechtcherine	**Sustainable and Resilient Infrastructure Vulnerabilities Considering Climate Change** Nisrine Makhoul		**Form-Finding Techniques for a Shell Reading Pavilion** Carolina J. T. P. Regly, Nicolas J. Vianna, Samira F. Mistro, Vanessa O.V. Zaccarias, Felipe C. Melachos, Thomaz Buttignol (video)	**Future reinforcement for concrete** Balazs Gyorgy
18:15-20:00	***Presentation of the proposals of the YMG (Amphitheater Antipolis) then cocktail for the Young Members Group (Méditerranée Space)***						

TUESDAY 17 JUNE 2025

8:00-8:30	***Registration desk & Coffee (Méditerranée Space)***					
	Amphitheater Antipolis					
8:30-9:30	**Keynotes - Chair Carmen Andrade**					
8:30-9:00	**Keynote 3 - Patrick Rougeau & Véronique Bouteiller: Performance-based approach, durability of low carbon concrete and corrosion: contributions of the French national project PERFDUB and the DECADES and DECISION scientific groups**					
9:00-9:30	**Keynote 4 - Stephan Schumacher & Thierry Lassabatère: Concrete for Cigéo: How to design the civil engineering for long-term geological disposal of radioactive waste?**					
9:30-10:00	***Coffee break & Exhibition (Gould Space)***					
10:00-11:15	**Parallel Session 4**					
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**
	SPECIAL SESSION 6 (1/2) Physical based modelling of assessment of existing concrete infrastructure Chairs Yuguang Yang & Mihailov Boyan	**SPECIAL SESSION 16 (1/2) Prefabricated Concrete Modular Buildings Chairs Eduardo Júlio & André Furtado**	**SPECIAL SESSION 10 (1/2) Retrofitting and strengthening of existing structures using non-metallic reinforced concrete Chair Alexander Schumann**	**SPECIAL SESSION 19 (1/2) Challenges and novel insights into the time-dependent behaviour of concrete Chair Roman Wan-Wendner**	**Parallel Session 4a Low carbon concretes Chair Laury Barnes**	**Parallel Session 4b Construction methods and management (1/2) Chair Johann Kolleger**
10:00-10:15	**Experimental study on the shear capacity of reinforced concrete slabs with skewness** Jiandong Lu, Eva Lantsoght, Yuguang Yang, Max Hendriks	**Prefabricated Concrete Modular Buildings: a renewed idea to cope with current housing challenges** André Furtado, Eduardo Júlio	**Strengthening of Reinforced Concrete Columns Using Recycled Polyethylene Terephthalate Fibers: A Preliminary Numerical Study** Korhan Deniz Dalgic, Uveys Gozun, Birkan Simsek, Medine Ispir, Alper Ilki	**Creep of concrete structures: what have we learned since Freyssinet and the Veurdre bridge and what do we need to improve in the future?** Jean Michel Torrenti	**Development of C25 Low Carbon Concrete: Mechanical and Durability Behaviors** Suliman Khan, Safat Al-Deen, Chi King Lee	**Cyclic testing of precast column-to-foundation joints equipped with a novel ductile mechanical connection system** Bruno Dal Lago, Enes Krasniqi, Marko Bartolac, Milot Muhaxheri, Enrico Anselmo Papa, Paola Costa
10:15-10:30	**Shear Assessment of Precast composite girders using FprEN 1992-1 based shear expressions** Mohammed Ibrahim, Marco Roosen, Max Hendriks, Yuguang Yang	**Lean-clinker mortars with recycled cement towards the production of low-carbon concrete for modular construction** Martim Nabais, José Alexandre Bogas, Ricardo Carmo, Hugo Costa, Ângela Oliveira	**Crack Formation Behavior of Carbon-Reinforced Concrete for State II Sealing Layers** Fabian Kufner, Michael Horstmann, Petra Rucker-Gramm, Jörg Reymendt, Jens Heckenbach, Rolf Scharmann	**Analysis of drying shrinkage and creep using a re-imbibition phase of concrete** Robin Cartier, Hugo Cagnon, Thierry Vidal, Jerome Verdier	**Low carbon sprayed concrete based on high filler content** Yvan Thiebaut, Massimo Stefanoni, Matthieu Jeusset, Paul-Alexandre Franco, Davide Michelis, Justin Denizeaux, Lionel Linger, Carlo Pistolesi, Enrico Dal Negro	**LT Bridge – Addressing Modern Demands in Bridge Engineering** Franz Untermarzoner, Johann Kollegger, Patrick Huber
10:30-10:45	**Assessment of Residual Shear Capacity of Deep Beams based Solely on Site Measurements** Boyan Mihaylov, Eissa Fathalla, Alexandru Trandafir	**Combined structural-energy optimization of precast concrete walls for modular buildings** Seyedsajjad Hosseini, Aléxia Brandão, André Furtado, Romain Sousa, Ricardo Carmo, Mariana Nunes, Pedro Rio, Eduardo Júlio	**Strengthening of Historical Low-Strength Concrete Structures with Carbon-Reinforced Concrete – Large Component Tests** Elisabeth Schütze, Alexander Schumann, Farhat Lamisa	**Concrete creep prediction – Cyclic hygric and mechanical exposures cannot be neglected** Michael Haist, Anna Lena Podhajecky	**Evolution of permeability of Low Carbon Ternary Blended Cements – a 180 day study** Berjees Qadr, Nicolas Gay, Georges AOUAD, Matthieu Briffaut	**Innovative Approach for Submerged Floating Road Tubes** Silvino Pompeu-Santos
10:45-11:00	**Behaviour of existing post-tensioned concrete bridge girders with bonded curved tendons** Alexandru Trandafir, Dan Dragan, Rik Steensels, Hervé Degée, Boyan Mihaylov	**Performance Analysis of Dry Connections in Precast Walls Under Cyclic Tension Loading** Ricardo Martins, Ricardo Carmo, Hugo Costa, André Furtado, Romain Sousa, Eduardo Júlio	**Concrete structures strengthened with carbon-reinforced concrete under service loads** David Sandmann, Carolin Würgau, Steffen Marx	**Autogenous Shrinkage Model for Concrete Considering the Combined Effects of Mineral** Admixtures, Huan-Chi Ma, Yue Geng, Giovanni Di Luzio, Yu-Yin Wang	**Mechanical and structural behavior of low-carbon concrete based on a clinker-free binder containing metakaolin** Tom Rigaud, Zakaria Djamai, Gabriel Samson, Raphaël Bucher, Christian CREMONA, Martin CYR	**Technical management of horizontal reaction force adjustment work and section force improvement by jacking down method in PC multi-span continuous rigid frame bridge - Construction Of Kinosaki Ohashi Bridge-** Toshiaki Fujiwara, Takashi Okubo, Hayami Yanagida, Noritake Hirata, Tomohiro Shibuya, Takahiro Inagaki
11:00-11:15		**Seismic behaviour of a 6-storey precast concrete modular building: Performance assessment and parametric study** André Furtado, Romain Sousa, Ricardo Carmo, Eduardo Júlio	**Synergy between silica fume and crystalline admixtures on the self-healing capacity of Textile-Reinforced Mortars** Niki Trochoutsou, Liberato Ferrara	**Refined analysis of reinforced concrete structures subjected to external loads and imposed deformations** Alejandro Perez Caldentey	**Mechanical behaviour and deformations of low-carbon concretes with limestone, bast furnace slag or metakaolin** Suzanne LE THIERRY, Thomas Duval, François Jacquemot	**Development of Replacement Technology for UFC Flat Decks and HSPJ Decks and Its Application to the Kobe Route Renewal Project** Hajime Aoi, Sota Sasawaki, Tomoaki Hasegawa and Yasuyuki Iwa-sato

11:15-12:30	Parallel Session 5					
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Gould 2 Room**
	SPECIAL SESSION 6 (2/2) Physical based modelling of assessment of existing concrete infrastructure **Chairs Yuguang Yang & Mihailov Boyan**	**SPECIAL SESSION 16 (2/2) Prefabricated Concrete Modular Buildings** **Chairs Eduardo Júlio & André Furtado**	**SPECIAL SESSION 10 (2/2) Retrofitting and strengthening of existing structures using non-metallic reinforced concrete Chair David Sandmann**	**SPECIAL SESSION 19 (2/2) Challenges and novel insights into the time-dependent behaviour of concrete** **Chair Thierry Vidal**	**Parallel Session 5a Structural design (2/4)** **Chair Enrico Baumgartel**	**Parallel Session 5b Recycling (1/2)** **Chair Elhem Ghorbel**
11:15-11:30	**Numerical modelling of RC dapped-end beams with different reinforcement layouts** Giovanni Menichini, Maurizio Orlando, Anssi Laaksonen	**Fire behaviour of modular reinforced concrete buildings – numerical simulation of the thermomechanical response** Eloísa Castilho, João Pedro Firmo	**Standardising Bond Characterisation Method for Carbon-Reinforced Concrete in Strengthening Applications: Interlaboratory lap-splice tensile tests** Duy Minh Phuong Vo, Nazmul Hasan, Elisabeth Schütze, Alexander Schumann, Miriam Melzer, Jan Philip Schulze-Ardey, Jan Bielak, Fabian Thems, Cynthia Morales Cruz, Vitalii Kryzhanovskyi, Christopher Taube	**Temperature impact on the mechanical properties of high-strength concrete** Shamseldin Abdo, Quoc Tri Phung, Robby Caspeele, Suresh Seetharam, Roman Wan-Wendner	**Generative design of reinforced concrete structures incorporating constructability aspects** Karin L. Yu, Eleni Chatzi, Walter Kaufmann	**Recycled sand for 3D-printed Strain Hardening Cementitious Composite: A Review of Recent Developments** Laura Sofia Gomez Jaramillo, Mladena Lukovic, Branko Savija, Wen Zhou
11:30-11:45	**Using acoustic emission monitoring to assess the reliability of existing concrete structures: a case study** Fengqiao Zhang	**Structural assessment of bolted connections under shear cyclic loading developed for precast concrete walls** Ricardo Martins, Ricardo Carmo, Hugo Costa, André Furtado, Romain Sousa, Eduardo Júlio	**Seismic behaviour at Ultimate Limit State of RC structures retrofitted with GFRP rebars** Mattia Mairone, Raffaele Tarantini, Giuseppe Andrea Ferro, Davide Masera	**Experimental study on the compressive sustained load strength of concrete with high age at loading** Jonas Geng, Robin Mecka, Freek Bos, Oliver Fischer	**Numerical application of a novel method to determine composite action proving load-dependent behaviour of the interface** Jules Smits, Stijn François, Ann Van Gysel, Tom Molkens	**Bond behavior of recycled aggregate concrete with steel rebars** Annkathrin Sinning, Dominik Wrona, Josef Hegger, Martin Classen
11:45-12:00	**Reconstructing As-Built CAD Drawings for Existing Buildings from Laser Scanning Data** Fengyu Zhang, Qingzhao Kong, Cheng Yuan, Peizhen Li	**Experimental characterization of the monotonic and cyclic behaviour of a new dry-horizontal joint between precast walls** Aléxia Brandão, Sajjad Hosseini, André Furtado, Ricardo Carmo, Romain Sousa, Yllnor Tmava, Wanchai Detphan, Wit Derkowski, Eduardo Júlio	**Mechanical characterization tests and numerical simulations for evaluating the effectiveness of fiber-reinforced cementitious mortar as shear strengthening of masonry walls** Carlo Vienni, Maurizio Orlando, Luca Salvatori	**Compressive strength development of concretes with volcanic ash exposed to realistic temperature conditions** Anja Klausen, Antonia Menga, Terje Kanstad	**Setting of arbitrary combinations of constant bending moments and constant shear forces in reinforced concrete beams** Thilo Schmidt, Clara Walsemann, Andrej Albert, Peter Mark	**Optimum contents of waste materials from wind farm decommissioning for incorporation into concrete mixes** Nerea Hurtado-Alonso, Marta Skaf, Ana Belén Espinosa González, Roberto Serrano-López, Chaimae Mourou, Juan M. Manso
12:00-12:15	**Experimental investigation of the fatigue behaviour of reinforced concrete dapped-end connections** Sameera Hippola, Boyan Mihaylov	**Computer Vision System for Dimension Control in the Prefabrication of Concrete Panels** Paul Debus, Jónatas Valença	**Highly resilient externally strengthened blasted concrete beams through improved self-centering** Cesare Signorini, Franz Bracklow, Eric Jacques, Chris Jackson, Petr Maca, Birgit Beckmann, Viktor Mechtcherine	**Time dependent modelling of concrete for the simulation of 3D printing** Libor Jendele, Jiri Rymes, Jan Cervenka, Michaela Herzfeldt	**Introducing a novel experimental setup for assessing the progressive collapse resistance of structures** Andri Setiawan, Diego Cetina, Maria L. Gerbaudo, Lorenzo Marin, Manuel Buitrago, Nirvan Makoond, Jose M. Adam	**Experimental Investigation of Aggregate Replacement Ratios in Concrete with Recycled Concrete Aggregates** Cecilie Kristensen, Linh Cao Hoang, Jesper Harrild Sørensen, Gregor Fischer, Lars Zenke Pørlov Hansen
12:15-12:30		**BIM Library Plugin for Circular Economy: Leveraging Digital Product Passports for Sustainable Design** João Palma, António Aguiar Costa	**Behavior of RC Beams Strengthened with CFRP Sheets Exposed to Low Temperature** Inyong Lee, Jongkwon Choi	**Homogenization Methods for Characterizing the Viscoelastic Behavior of Concrete in Service and Deconstruction Phases** Francois Soleilhet, Maxime Ressier, Julien Sanahuja	**Partial collapse tests of a precast concrete building specimen** Andri Setiawan, Nirvan Makoond, Manuel Buitrago, Jose M. Adam	
12:30-14:00	***Lunch & Exhibition (Gould Space)***					
13:00-14:15	***Posters Session (Gould Space)***					

Application of Digital Twins and IoT for investigating damage caused to buildings under dynamic influences
Kaliukh Iurii, Slyusarenko Yuriy, Marienkov Mykola, Siedin Volodymyr, Tytarenko Volodymir, Kovba Vladyslav, Kosheleva Nina, Kurash Sergii, Yakovenko Ihor, Usenko Mykola, Zhemelinsky Ilya, Vasyl Kliuiev, Berchun Yaroslav

Climate change induced carbonation and corrosion of EU building stock: recent findings
Dimova Silvia, Polo Lopez Cristina Silvia, Sousa Maria Luisa, Rianna Guido, Bastidas-Arteaga Emilio, Nogal Maria, Gervasio Helena, Martorana Emilio, Reder Alfredo, Athanasopoulou Adamantia

Concrete-reinforcement bond tests in high-performance self-consolidating concrete
Dyba Marcin

Estimation of Lateral Displacement Induced by High-Rise Building Horizontal Loads Using Timoshenko Beam Theory
Alnaser Ahmad, Issa Mohamad

Evaluation of The Corrosion on Capacity of Prestressed Concrete Girder
Nossoni Goli, Maharjan Saroj

Investigation of Mechanical Properties of Ceramic Waste Powder Based Low Molarity Geopolymer Composites
Aslı Polat, Yunus Emre Avşar, Mücteba Uysal

Mechanical and durability properties of functionally graded crumb rubber concrete
Mohammed A. Mujalli, Samir Dirar, Marios Theofanous, Abdeliazim Mustafa Mohamed

Mechanical Performance of Sustainable Concrete with Recycled PET and Tire Rubber
Valeria Franco-Quiñonez, Natividad García-Troncoso, David Valverde-Burneo, Ignacio Segura

Monitoring drying in cement paste and concrete: Application of a novel ultrasound based method
Eva Jägle, Jithender J. Timothy, Christoph Gehlen

Numerical simulation of stud pullout in concrete using a regularized damage model
Matthieu Le Noir de Carlan, Ludovic Jason, Luc Davenne

Optimising robotic production of interlocking dry joints for the connection of reused concrete members
Ben Stöhr, Marius Hägle, Alexander Stark

Review of testing, assessment, and design methods on post-installed bonded fasteners into masonry under seismic action
Doruk Gurkut, Giovanni Muciaccia

Software-Based Optimization of Reinforced Concrete Floor Structures Using Environmentally Friendly Materials
Anna Horáková, Iva Broukalová, Alena Kohoutkova

The metro station modification into a multi-storey shopping center using Digital Twins and Internet of Things
Volodymyr Tytarenko, Iurii Kaliukh

Trials on fibre reinforced concrete for hydraulic structures
Nicolas Bagneux, Marie Allain, Germain AURAY, Domitile Sébastien, Bastien Dupuis, Papazian Mickael, Sauvaget Cyrille

14:15-15:30	Parallel Session 6						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 17 (1/2) ***fib* Guides on protection, repair and strengthening** **Chairs Eduardo Júlio & Veronique Bouteiller**	**SPECIAL SESSION 18** **Monitoring of reinforced concrete structures by means of embedded sensors to assess the indicators of their durability** **Chair Géraldine Villain**	**SPECIAL SESSION 21 (1/2)** **3D printing of concrete and concrete structures** **Chairs Yong Yuan & Yaxin Tao**	**Parallel Session 6a** **Innovative materials** **Chair Laurent Michel**	**Parallel Session 6b** **UHPFRC (1/2)** **Chair François Toutlemonde**	**Parallel Session 6c** **Construction methods and management (2/2)** **Chair Jan Vitek**	**Parallel Session 6d** **Recycling (2/2)** **Chair Nikola Tosic**
14:15-14:30	**Overview on the fib Guide on protection, repair and strengthening techniques for concrete structures (fib bulletins 102 and 103)** Eduardo Júlio	**Monitoring of water content of concrete by embedded resistivity and newly developed capacitive sensors** Houssein Ibrahim, Géraldine Villain, Jean-Paul Balayssac, Sérgio Palma Lopes, Narintsoa Ranaivomanana, Xavier Dérobert	**Conceptual Design and Production of a 3D Printed Concrete Base Brick with Evaluation of its Thermal Properties** Elisabeth Radl, Marc-Patrick Pfleger, Alexander Sieh, Markus Vill	**Initial investigations on stress redistributions between different CFRP reinforcement types** Marius Hägle, Felix Hofmann, Alexander Stark	**Evaluation of Fatigue Characteristics of Self-Healing UHPC using Ultrasonic and Natural Frequency Methods** Yusuke Nagai, Zhewen Huang, Roberto Felicetti, Liberato Ferrara	**An Optimization Method for the Intelligent Modularization of Concrete Frame Structures** Niklas Frank, Robert Renz, Felix Hofmann, Albert Albers	**Experimental investigation of the short- and long-term behaviour of recycled aggregate concrete precast/prestressed hollow core slabs** Michael McGinnis, Michael Gangone, Alejandro Nogales, Lizeth Marisol Gomez-Santana, Brad Weldon, Adam Reihl, Nikola Tošić, Yahya Kurama
14:30-14:45	**Electrochemical chloride extraction (chapter 7 from bull 102 and "a review")** Véronique Bouteiller	**Monitoring of water content and mechanical properties of concrete by ultrasonic velocity enhanced by tomographic method** Rouba Hariri, Nicolas Derrien, Maximilien Lehujeur, Jean François Chaix, Vincent Garnier, Olivier Durand, Odile Abraham	**Pore structure analysis of printcrete under varying temperatures** Yaxin Tao, Yong Yuan, Yi Zhang, Timothy Wangler	**Topological interlocking assemblies based on origami inspired carbon-reinforced concrete waterbomb modules** Carlos G. Gomes, Sascha Stüttgen, Meike Weiß, Reymond Akpanya, Alice C. Niemeyer, Daniel Robertz, Rostislav Chudoba	**Finite Element Analysis for Eccentric Performance of Ultra-High Performance Concrete Columns with Fiber-Reinforced Polymer Bars** Baozheng Zhang, Weichen Xue, Jiafei Jiang	**Construction of the arch bridge in Cervena** Jan Vitek, Milan Spicka, Petr Sykora, Roman Simacek	**Design of Rigid Pavement with Hydraulic Concrete Using Recycled Tires on a Class IV Road, Ruta del Cacao – Guayas - Ecuador** Natividad García Troncoso Samantha Hidalgo-Astudillo, Julianny Torres, Javier Zuña, Nadia Quijano, David Valverde, Carola Gordillo, Albert de la Fuente
14:45-15:00	**Electrochemical chloride extraction considering ASR potential of concrete (chapter 7 from bull 102)** Takao Ueda	**Metrological analysis to extract the qualified observables, corrected from temperature effects** Jean-François Chaix, Rouba Hariri, Houssein Ibrahim, Odile Abraham, Sergio Palma Lopes, Xavier Derobert, Jean-Paul Balayssac, Vincent Garnier, Geraldine Villain	**Concrete 3D printing and reinforcement: Determination of bond strength through pull-out tests** Johannes Ewerz, Marc-Patrick Pfleger, Elisabeth Radl, Patrick Huber	**A Holistic Approach for Carbon-Reinforced Concrete Structures Using Modular Design and Homogenization Techniques** Marja-Lisa Herrmann, Domen Macek, Leonie Mester, Finn Döpke, Aya Ragab, Viviane Adam, Hagen Holthusen, Tim Brepols, Simon Klarmann, Sven Klinkel	**Ultra-High Performance Concrete and Normal Strength Concrete Interfacial Bond in Columns** Mina Fakeh, Amir Fam	**How modern technology can support the inspection of cable-stayed bridges** Gianni Moor, Colm O'Suilleabhain, Tristan Craig-Tyler	**Influence of Fine recycled aggregates on the properties of 3D printing concrete** Jose Luis Hermida, Ruth Saavedra, Samantha Hidalgo-Astudillo, Nikola Tošić, Miren Etxeberria, Albert de la Fuente
15:00-15:15	**Experimental investigation on effects of graphene on ICCP-SS intervention method for concrete structures** Xiaoming Zhu, Meini Su, Yong Wang	**Combination of multi-physical sensors for concrete durability indicators evaluation using AI** Sylvain Dufau, Cédric Baudrit, Mehdi Sbartaï, Vincent Garnier, Géraldine Villain, Sidi Mohammed Elachachi, François Demontoux	**Experimental analysis of the structural behavior of hybrid concrete 3D printed-cast beam systems** Lien Saelens, Kim Van Tittelboom, Robby Caspeele, Roman Wan-Wendner	**Comparison between experimental and numerical investigation of the bending behavior of carbon prestressed concrete plates with openings** Nima Kian, Yasar Hanifi Gedik, Goran Vojvodic, Nguyen Duc Tung, Nguyen Viet Tue	**A comparative study on design approaches for Ultra-High Performance Concrete flexural elements** Sina Yüksel, Torsten Leutbecher	**High-Speed Visual Inspection of Railway Viaduct Intrados** Pierre Carreaud, Ayoube Dakir, Thibault Gouache, Julien Baron	**Optimizing Concrete Mix Design for Increased CO2 Absorption** Goli Nossoni, Eddie Luzik, Ayodeji Ajidahun
15:15-15:30	**Externally Applied Textile Reinforced Systems - fib Bulletin 103 Chapter 6** Francesco Bencardino, Pietro Mazzuca	**Monitoring of electrical resistivity profiles of concrete structures submitted to tide in marine environment** Sérgio Palma Lopes, Marie-Ange Eid, Géraldine Villain, Stéphanie Bonnet		**Time-dependent flexural behavior of hybrid fiber reinforced concrete** Sergio Carmona, Giovanni Plizzari			
15:30-16:00	***Coffee break & Exhibition (Gould Space)***						

16:00-17:15	Parallel Session 7					
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**
	Parallel Session 7d **Structural design (3/4)** **Chair Konrad Bergmeister**	**SPECIAL SESSION 24** **Extending the life of concrete structures via intelligent digital twin technology** **Chairs Chongjie Kang & Steffen Marx**	**SPECIAL SESSION 21 (2/2)** **3D printing of concrete and concrete structures** **Chairs Yong Yuan & Yaxin Tao**	**Parallel Session 7a** **Assessment (1/2)** **Chair Akio Kasuga**	**Parallel Session 7b** **UHPFRC (2/2)** **Chair Liberato Ferrara**	**Parallel Session 7c** **Creep and shrinkage** **Chair Alejandro Perez-Caldentey**
16:00-16:15	**Directive reuse precast concrete elements** Rob Vergoossen, Danny Jilissen, Thijs Noordhoek	**Bridge Database for Digitalization** Sylvia Keβler	**Experimental Study on Time-Dependent Pumping Behaviour of 3D Concrete Printing** Pathmanathan Rajeev, Nilusha Nissanka, Jay Sanjayan	**Structural assessment of the Albert-Louppe Bridge: temperature effects on the global behaviour** Sellin Jean-philippe, David Tronchet, Antoine Theordore	**Fiber alignment in hybrid fiber reinforced self-compacting UHPFRC** Thomaida Polydorou, Demetris Demetriou, Prodromos Pigiotis, Anna Mina, Demetris Nicolaides, Michael F. Petrou	**Comparing the design of post-tensioned concrete bridges by EN 1992 and TMH7 by a probabilistic analysis** Francois Joubert, Gideon Van Zijl, Nico De Koker, Pierre Van der Spuy
16:15-16:30	**Comparison between timber-concrete and steel-concrete composite slabs. Where are we now?** Laura Corti, Giovanni Muciaccia	**Automated Damage Detection in a Nonlinear Model Updating Approach for Concrete Bridges** Martina Schnellenbach-Held, Bjarne Sprenger	**Analysis of factors influencing the maximum continuous printing height of 3D printed concrete** Zibo Zuo, Yulin Huang, Yaxin Tao, Yong Yuan, Wouter De Corte	**In-situ survey of post-tensioned bridges in Slovakia** Peter Paulík, Jakub Gašpárek	**UHPFRC slabs for retrofitting half-joints bridges** Matteo Colombo, Greta Cornaggia, Giulio Zani, Marco Di Prisco	**Propagation of creep and shrinkage model uncertainties in predicting multi-decade behaviour of box girder bridges** Arthur Slobbe, Gijs Eumelen, Bart Van den Broek, Jasper Doorgeest
16:30-16:45	**The influence of nodal region detailing on the quasi-static and dynamic response of frame structures** Andrea Monserrat-López, Duarte M. Viula Faria, Fabio Brantschen, Alejandro Nogales Arroyo, Miguel Fernández Ruiz	**Characterisation and benefits of digital sensors for Structural Health Monitoring of the Nibelungen Bridge Worms** Ralf Herrmann, Eshwar Kumar Ramasetti, Poojitha Ponnam, Sebastian Degener	**Assessment of Post-Tension Capacity in Novel 3D-Printed Topology-Optimized Formwork via Load Transfer Testing** Mahsa Sakha, Saim Raza, Xiaomeng Wang, Haifeng Fan, Niels Pichler, Moslem Shahverdi	**In situ and laboratory testing of fiber-reinforced cementitious mortars for cortical restoration of viaduct piles** Carlo Vienni, Luca Salvatori, Maurizio Orlando, Salvatore Giacomo Morano	**Time-dependent behaviour of PS-UHPC balanced cantilever box girder with a central hinge** A S Dwivedi, M. N. Shariff	**Nonlinear finite element analysis of the mechanical behavior of asphalt considering viscoelastic characteristics** Wooyeon Kim, Hyo Eun Joo, Yuya Takahashi, Maeshima Takuya
16:45-17:00	**Parametric design study of textile-reinforced concrete sandwich panels with recycled PET foam core** Erich Meiners Munoz, Panagiotis Kapsalis, Tine Tysmans	**Quantifying the uncertainty of predictive simulations in digital twins through the identification of model bias** Daniel Andrés-Arcones, Martin Weiser, Phaedon-Stelios Koutsourelakis, Jörg F. Unger	**Characterization of Cold Joint Formation in Digitally Printed Mortar During the Dormant Phase: A Time-Dependent Study** M Divya, S.A.H Riza, M. N. Shariff	**Evaluation of residual prestress in concrete beam with modified saw-cut method** Andrea Nino Consiglio, Gianpaolo Rosati, Giovanni Muciaccia, Dario Coronelli, Gianluca Ascari		**Restrained shrinkage induced early-age cracking of blended-cement based concrete with fly ash and slag** Castel Arnaud, Sumaiya Afroz, Quang Dieu Nguyen, Taehwan Kim, Htet Lin
17:00-17:15	**Experimental investigation of the combined in-plane and out-of-plane shear capacity of reinforced concrete elements without shear reinforcement** Jens Skovgaard Larsen, Søren Gustenhoff Hansen, Henrik Brøner Jørgensen	**Probabilistic Sensor Fault Detection in Bridge Structural Health Monitoring** Jan-Hauke Bartels, Cedric Eisermann, Chongjie Kang, Steffen Marx		**Research on tendon's transmission length in old post-tensioned concrete structures** Rafał Walczak, Wit Derkowski		**Restrained Shrinkage Cracking in FRC Slabs** Porsiem Tang, Ali Amin, Ian Gilbert, Walter Kaufmann

7:15-18:30	Parallel Session 8						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 3 **Structural and Seismic Performance Evaluation of Ageing Concrete Bridges** **Chair Mehdi Kashani**	**SPECIAL SESSION 25** **Strut-and-Tie & Stress Fields** **Chair Miguel Serio Lourenço**	**Parallel Session 8a** **Fibres (1/3)** **Chair Tor Arne Martius-Hammer**	**Parallel Session 8b** **Assessment (2/2)** **Chair Max Hendriks**	**Parallel Session 8c** **Durability (1/5)** **Chair Bruno Godart**	**Parallel Session 8d** **Concrete structures (2/)** **Chair Terje Kanstad**	**Parallel Session 8e** **Structural design (4/4)** **Chair Steve Foster**
17:15-17:30	**Numerical Modelling of Ageing RC Bridge Piers Considering Nonuniform Geometric-Mechanical Degradation** Ziliang Zhang, Hammed O. Aminulai, William Powrie, Mohammad M. Kashani	**Strut-and-tie models and stress fields: past, present and future** Walter Kaufmann, Karin L. Yu	**The particle-matrix model as an easy tool for mix design of fibre reinforced concrete** Tor Arne Martius-Hammer	**Assessment of the corrosion degree of beams subjected to accelerated corrosion based on indirect data** Eline Vereecken, Wouter Botte, Geert Lombaert, Robby Caspeele	**Experimental Basis for Assessment of Concrete Structures Exposed to Alkali-Silica Reactions** Kathrine Mürer Stemland, Terje Kanstad	**Analysis of the effect of rebar couplers geometry on the cracking behaviour of reinforced concrete beams** Amine Ben-Dahou, Mohamed Nasser, Emmanuel Ferrier, Aron Gabor, Laurent Michel, Rémi Gardes, Richard Boisson, Philippe Huet, Clément Poissonnet, Jean-Marie Dolo	**Experimental evaluation of concentrated load distribution in prefabricated floor** Milosz Jeziorski, Wit Derkowski
17:30-17:45	**Performance assessment of corroded PC beam elements** Zila Rinaldi, Alberto Meda, Fabio Di Carlo, Filippo Molaioni		**Quality Control of Fibre-Reinforced Concrete Using the Montevideo Test: A Case Study in Real-World Construction** Victoria Olivera, Diego Novello, Luis Segura-Castillo	**Shear Capacity of Reinforced Concrete Beams with Bent-up Bars** Esra Jespersen, Henrik Brøner Jørgensen, Frederik Autrup	**Effects of late heating on the delayed ettringite formation in concrete: multi-parameter study** Marius Nanfack, Adrien Bouvet, Hector Gomart, Albert Noumowe, Pierre Seguin	**Performance assessment of structural joints against progressive collapse in precast concrete structures** Sepideh Akbari, Robert Vollum, Bassam Izzuddin	**Experimental Investigation of Wall Connections Designed for Disassembly** Henrik Brøner Jørgensen, Jakob Bay Sørensen, Christian Buch Goldenberg, Kim Nikolajsen
17:45-18:00	**Modeling for seismic analysis of an existing segmental cantilever bridge** Maria Rosaria Pecce, Antonio Bilotta,	**Practical application of Levels-of-Approximation approach in Strut-and-Tie and Stress Field modelling** Duarte Viula Faria, Carlos Meléndez Gimeno, Miguel Sério Lourenço, Miguel Fernández Ruiz	**FRCM strengthening of floor slabs in Citterio building** Marco Di Prisco, Isabella Colombo, Lorenzo Radice, Christian Amigoni fulltext : paper for oral presentation	**Inspection of Water Intake Tunnels Using High-Efficiency Photogrammetric Methods** Paoline Prevost, Thomas Mauroux, Thibault Gouache, Pierre Carreaud	**Performance-based evaluation of Delayed Ettringite Formation reactivity of precast concrete elements containing limited slag content** Yvan Thiebaut, Thomas Jochyms, Lionel Linger, François Cussigh, Laurent Boutillon, Julien Gauduchon, Nastaran Vivan, Abdelkrim Ammouche, Aurélien Delevoye, Yves-Henri Pignol	**Investigations on the structural behaviour of prestressed modular shell structures with dry joints** Felix Hofmann, Ben Stöhr, Alexander Stark	**A series of load tests for the preservation of railway arch bridges** Jenny Keßler, Steffen Marx
18:00-18:15	**Fiber-based Modeling of Corroded RC Bridge Piers** Simone Reale, Alessandro Palermo, Alberto Pavese	**A computationally efficient FE-tool for ULS and SLS stress field analysis using convex optimization** Daniel Vestergaard, Kasper P. Larsen, Peter N. Poulsen, Linh C. Hoang	**Effect of incorporating different quantities of recovered steel fibres on the mechanical properties of fibre reinforced concrete** Guanzhi Liu, Maria Koetsier, Nikola Tošić, Wim Ekkelenkamp, Marija Nedeljković, Mladena Luković, Albert De La Fuente	**3D simulation of restrained ASR expansion for numerical assessment of existing concrete structures** Zhanchong Shi, Kathrine Stemland, Guomin Ji, Max Hendriks, Terje Kanstad	**Investigation, analysis and cause estimation of cracked prestressed concrete girders due to the application of the desalination Method** Koji Osada, Takao Ueda, Akira Nanasawa, Kenta Sato	**Discrete numerical simulations of reinforced concrete glass hybrid beam** Yilin Wang, Jan Vorel, Bert Van Lancker, Alessandro Proia, Daniele Pelessone, Jan Belis, Roman Wan-Wendner	**Selection of appropriate geometries of additively manufactured reinforcement bars for the bond with concrete** Luca Locher, Thomas Braml, Bjoern Kleemann
18:15-18:30	**Experimental tests inducing shear failure on PC bridge deck girders** Francesco Tondolo, Pierclaudio Savino, Antonino Quattrone, Donato Sabia, Mattia Anghileri, Fabio Biondini, Gianpaolo Rosati, Bernardino Chiaia	**Conceptual framework for the consistent estimation of crack widths in disturbed concrete regions** Boyan Mihaylov, Jaime Mata Falcón, Miguel Ferreira	**Influence of Interlayer Properties on the Mechanical Performance of Multi-Layered Concrete Structures** Salma Es-satte, Syed Yasir Alam, Jean-Michel Torrenti, Ahmed Loukili	**Updating Wind Load Effects in Assessment of Existing Roof Structure - Case Study** Miroslav Sykora, Dimitris Diamantidis, Jana Markova, Michal Sen, Adam Valik	**Performance Study of a New Sliding Material for Use in Structural Bearings** Mariela Cordero Verge	**Formulation of a consistent crack width calculation method for reinforced concrete members** Otto Terjesen, Reignard Tan, Terje Kanstad	**Application of the applied element method to a reinforced concrete sub-assemblage under a column-removal scenario** Nada Elkady, Laurence Weekes, Levingshan Augusthus-Nelson
18:30-19:00	***BUSES BOARDING***						
19:30-23:30	***GALA DINNER FOR REGISTERED PARTICIPANTS***						

WEDNESDAY 18 JUNE 2025

8:00-8:30	***Registration desk & Coffee (Méditerranée Space)***						
	Amphitheater Antipolis						
8:30-9:30	**Keynotes - Chair Agniezska Bigaj-Van Vliet**						
8:30-9:00	**Keynote 5 : Beatrice Belletti, Simone Ravasini : Structural capacity assessment of PC members subjected to different corrosion-induced damage scenarios**						
9:00-9:30	**Keynote 6 : Elisabeth Marie-Victoire : The challenges of diagnosing and restoring historic concrete**						
9:30-10:00	***Coffee break & Exhibition (Gould Space)***						
10:00-11:15	**Parallel Session 9**						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 21 (1/2) Punching Behaviour of Flat Slabs Chair Antonio Ramos	**SPECIAL SESSION 22 (1/2) Data-Driven Innovations in Concrete Materials and Structures Chairs Syed Yasir Alam, Sandra Nunes, Moncef Nehdi**	**Parallel Session 9a Durability and corrosion (2/5) Chair José Matos**	**Parallel Session 9b Seismic behaviour (1/2) Chair Alper Ilki**	**Parallel Session 9c Concrete structures (2/2) Chair Yi Zhang**	**Parallel Session 9d Rehabilitation and modifications (1/2) Chair Heggade**	**Parallel Session 9e Concrete (1/3) Chair Giovanni di Luzio**
10:00-10:15	**Properties of the interface between two concrete layers for strengthening flat slabs** Katarina Gajdosova, Daniel Ceres	**Analysis on empirical knowledge transition on mix proportioning by using machine learning** Satoshi Fujimoto, Chiharu Usui	**Study on the influence of compactness, and type of additions on the durability of low clinker concrete** Marion Vouzelaud, Myriam Carcasses, Franck Cassagnabere, Jonathan Mai-Nhu, Patrick Rougeau	**Seismic and Energy Retrofit of Reinforced Concrete Buildings Envelopes: State-of-the-art review** Christiana Filippou, Daniel Oliveira, Dionysios Bournas, Paulo B. Lourenco	**Design and construction of the iconic Saint-Denis Pleyel station in the Grand Paris Express project** Yi Zhang, Christophe Sandré	**Stays replacement on the Vasco da Gama Bridge** Jean-Michel Odin, Michel Virlogeux, Patrick Ladret, Nicolas Trotin, Rui Monteiro	**Can maturity method be applied to low carbon thin concrete elements?** Agathe Bourchy, Ibrahim Dahiru, Jean-Michel Torrenti, Gael Le-Bloa
10:15-10:30	**Numerical analysis of fire-induced effects on load-carrying capacity of reinforced concrete slab-column connections under unbalanced moments** Ricardo Randi, Andreia Fanton, Leandro Trautwein, Luiz Carlos Almeida, António Pinho Ramos	**Automated Air Void Parameter Evaluation in Hardened Concrete using Confocal Laser Scanning Microscopy and Deep Learning** Viktor Kostic, Viktor Kotsev, Qadeer Khan, Daniel Cremers, Jithender Timothy, Thomas Kränkel, Christoph Gehlen	**Low-carbon concretes: natural diffusion and migration in a non-steady-state regime** Stéphanie Bonnet, Gayelle Fahed, Anthony Soive	**Preliminary Study on the Seismic Behavior of CFRP-Confined Non-Conforming RC Columns with Retained Plaster Layer** Ali Gurkan Gencali, Medine Ispir, Alper Ilki	**Causeway footbridges : technical challenges deriving from the integration of a two-part duct and integrated LED system onto stay cables and aerodynamic impacts** Vincent Maillet, olivier flamand, Nikolaj Pedersen, Matthieu Guesdon	**The application of precast panel "Cap Slab" for deck replacement work of PC composite girder brirges in Japan** Nakada Takafumi, Tominaga Takayuki, Mitamura Kenji, Ikehata Shinya	**Modelling and Analysis of Hydration Heat Causing Early Age Cracking in Massive Concrete Structures** Simona Potůčková, Milan Holý, Jiří Kolísko
10:30-10:45	**Test set-up effect on the punching behavior of slab-column connection: a numerical and theoretical investigation** Rafael Díaz, Ricardo Randi, Leandro Trautwein, António Pinho Ramos	**Fresh state concrete: augmenting sense data with digital tools** Callum White, Janet M. Lees	**Diffusive methods for measuring carbonation properties of concrete under natural laboratory conditions** Ouijdane Qacami, Bruno Huet, Philippe Turcry, Abdelkarim Aït-Mokhtar, Ravi Patel, Frank Dehn	**Impact of Incorporating Parallel Threaded Mechanical Coupler Splices on the Seismic Behavior of Reinforced Concrete Columns** Mohamed Nasser, Amine Ben-Dahou, Laurent Michel, Emmanuel Ferrier, Aron Gabor, Rémi Gardes, Richard Boisson, Philippe Huet, Clément Poissonnet, Jean-Marie Dolo	**Lost knowledge in construction history - A case study of historical prestressing systems** Jakob Vogt, Johannes Reimer, Steffen Marx	**Lean duplex stainless steel: a solution to prevent corrosion for reinforced concrete exposed to severe chloride environments** Véronique Bouteiller, Sebastien Mignocchi, Eric Chauveau, Thierry Chaussadent, Philippe Mauger, Amandine Bonnet, Victor Da-Silva	**Effect of intermittent drying periods on the surface deterioration of blast furnace slag mortars during freeze-thaw de-icing salt attacks** Alexander Haynack, Jithender J. Timothy, Thomas Kränkel, Christoph Gehlen
10:45-11:00	**Contribution of Drop Panels to Prevent Progressive Collapse of Columns Supported RC Flat Slabs** David Yankelevsky, Yuri Karinski, Vladimir Feldgun	**Prediction of mortar flow loss time by using machine learning of electrochemical properties** Chiharu Usui, Satoshi Fujimoto, Shin Hara	**Sustainable concrete repair practices in Switzerland development of a low carbon footprint, self-healing structural mortar** Michel Di Tommaso, Marco Basaldella, Paolo Tudori, Paolo Sabatini	**Calculation method based on BRB equivalent stiffness and engineering application** Xu Yang, Bin Xue, Xiangxiang Ren, Peizhen Li, Wenlu Wen	**Investigation of Shear Cracks in Reinforced Concrete Slender Members with Shear Reinforcement** Aakriti Khadka, Giorgio T. Proestos	**Effect of Chipping into End Regions of Pre-tensioned Prestressed Concrete Girders on Anchorage Behavior of Strands** Jinsei Kuwano, Eisuke Nakamura	**Green House Gas implications, steel reinforcement corrosion and concrete carbonation** Melchers Rob, Igor Chaves
11:00-11:15	**Punching behavior of slab-column connections with recycled coarse aggregate concrete** António Ramos, Carla Marchão, Rui Marreiros, Manuel Domingues, Tainara Cardos	**Labelling Strategy Optimizer: An Optimized and Personalized Labelling Solution** Dheeraj Dhruvakumar, Navid Ranjbar, Zahra Rastegar	**Report on Chloride-Induced Deterioration of Concrete Structures on the Hanshin Expressway** Kyoko Kinoshita, Ichiba Takato, Shinomiya Taku, Aoi Hajime			**Retrofitting beams at the roof level of existing RC buildings to prevent their progressive collapse** Juan Sebastián Fontalvo, Lisbel Rueda-García, Brais Barros, Manuel Buitrago, Jose M. Adam	**Effect of binder composition on chloride diffusivity and binding capacity of cementitious material from Australian bentonite** Oluwatosin Babatola, Alastair Macleod, Laurie Aldridge, Frank Collins, Will Gates
11:15-11:30	**Influence of column rectangularity on punching shear assessment of sudden column removal scenarios** Maria Liapopoulou, Karl Micallef, Juan Sagaseta						

	Parallel Session 10						
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**	**Gould 2 Room**
	SPECIAL SESSION 21 (2/2) **Punching Behaviour of Flat Slabs** **Chair Antonio Ramos**	**SPECIAL SESSION 22 (2/2)** **Data-Driven Innovations in Concrete Materials and Structures** **Chairs Syed Yasir Alam, Sandra Nunes, Moncef Nehdi**	**Parallel Session 10a Durability and corrosion (3/5)** **Chair Lionel Linger**	**Parallel Session 10b Seismic behaviour (2/2)** **Chair Alessandro Palermo**	**SPECIAL SESSION** **Macro Synthetic Fiber-reinforced structural elements – short- and long-term behaviour** **Chairs Albert de la Fuente, Nicola Buratti, Pedro Serna, Nikola Tosic**	**Parallel Session 10d Reinforcement** **Chair Antonio Caballero**	**Parallel Session 10e Concrete (1/2)** **Chair Mouna Boumaaza**
11:15-11:30	**Influence of planted column offset on shear resistance of transfer slabs** Jiayu Long, Robert Vollum, Lorenzo Macorini	**Application of anomaly detection method to hammering test of concrete structures** Hiroshi Shimbo, Toshiaki Mizobuchi, Tomoko Ozeki, Junichiro Nojima	**Durability for Sustainability - a Balancing Act** Brett Pielstick, Ron Bryson	**Forced Vibration Testing of a Rehabilitated Five-Story Reinforced Concrete Shear Wall University Library** Cole McDaniel, Peter Laursen, Elizabeth Splees, Samuel Royston	**Time-dependent behaviour of polypropylene fibre-reinforced beams: conclusions and takeaways from a three-year experimental campaign on full-scale beams under sustained load** Nikola Tošić, Jürgen Bokern, Martin Hunger, Albert de la Fuente	**Experimental study on overlap joints of concrete screws as post-installed reinforcement** Pascal Perrin, Jürgen Feix	**Diagnosis of Reinforced Concrete Elements in a Nuclear Power Plant Cooling Tower for Service Life Extension** Noureddine RAFAÏ, Abdelkrim Ammouche, Thibault Lenormand
11:30-11:45	**Modelling punching shear failure under eccentric loading by means of nonlinear joint elements** Chunrong Lu, Robert Vollum, Lorenzo Macorini	**Structural Design Workflows using Multi-Modal Human-Machine-Interfaces in Dlubal RFEM for Concrete Analysis and Design** Michael Kraus, Isamu Lautenschläger, Jaroslav Broz, Georg Dlubal	**Predictive Maintenance and Optimization of Reinforced Concrete Structures: A Comprehensive Tool for Durability Prediction in Maritime and Road Infrastructure** Paulo Claude, Frederic Duprat, Thomas De Larrard, Jonathan Mai-Nhu, Patrick Rougeau, Louis Marracci, Pierre Mazurelle	**Seismic performance of composite sandwich shear walls with different flange types** Yonggang Li, Bin Zhao	**Enhanced Flexural Performance: Polypropylene Fiber-Reinforced Concrete Beams with Low Reinforcement Ratio** Krishnaa Subramanian, Martin Hunger, Jürgen Bokern, Tom Molkens, Rutger Vrijdaghs	**The large-scale renovation work on a 23-span post-tensioned T-shaped girder bridge on Hanshin Expressway No.3 in Japan** Hiroki Tomonari, Kota Hamazaki, Yuichi Yamashita, Tagawa Chihiro, Suzuki Hiroyuki	**Coupled Analysis of Oxygen Diffusion and Corrosion Re-actions in Cementitious Materials Using 3D Pore Model** Kai Tanigawa, Keiyu Kawaai, Nami Ishizaki
11:45-12:00	**Numerical modeling of two-way shear in post-tensioned flat slabs** Mary Beth Hueste, Madhura Chavan	**Data-driven structural reliability assessment of precast SFRC tunnel segments using tests carried out on L16-1 of the Grand Paris Express project** Yi Zhang, Silvia Ientile, Franziska Schmidt, Christophe Sandré, François Toutlemonde	**Frequentist parameter estimation techniques applied to the fib carbonation model** Juan Mauricio Lozano Valcarcel, Thomas Kränkel, Amir Rahimi, Christoph Gehlen	**Impact of Corrosion on seismic response of reinforced concrete structures in severe exposure conditions Environment** Michele Delconti, Giovanni Muciaccia, Liberato Ferrara	**Performance Assessment of fiber-reinforced concrete with recycled plastics: An Experimental Study** Antonella D'Alessandro, Laura Ierimonti, Alina Elena Eva, Matteo Draconte, Luca Torelli, Ilaria Venanzi	**Investigation of spatial position of carbon grids in planar textile-reinforced concrete members** Lore Zierul, Berk Gündogdu, Birgit Beckmann, Steffen Marx	**Innovative concrete carbon mixing system: Preliminary results** Marco Davolio, Stefano Gelain, Federico Furlani, Giovanni Muciaccia, Liberato Ferrara
12:00-12:15	**Experimental Setup for Investigating Shear and Punching Behaviour of Reinforced Concrete Slab Bridge on Columns** Juuso Auvinen, Anssi Laaksonen	**Basic research on assessing progression of cracks inside reinforced concrete members using machine learning with electromagnetic waveforms** Ruiko Toriumi, hinata yamamoto, Junichiro Nojima, Ito Hitoshi, Toshiaki MIZOBUCHI	**HS2 project: supply of an Electrically Isolated Tendons for a precast segmental viaduct, in compliant with fib 75 requirements** Antoine Carry, Nicolas Demey, Nuno Geirinhas	**ISOSISM PS for optimal seismic protection of concrete structures** Mauro Sartori, Stefano Barone, Ivan Alende, Charles Cynober, Cyril Gaucherand	**Experimental study on hybrid fiber reinforced concrete with macro-synthetic and steel fibers** Giovanni Plizzari, Livio Pascali, Matteo Draconte, Marco Paparella, Francesco Surico, Luca Torelli	**Effects of shear properties of thermoplastic Basalt FRP (BFRTP) reinforcing bars on the structural performance of BFRTP-RC beams** Yasuo Yamasaki, Ryota Kurihara, Motohiro Ohno, Tetsuya Ishida	**Future prospects for the digital quality control of fresh concrete using artificial intelligence and computer vision** Michael Haist
12:15-12:30	**Punching Shear Behavior of Full-Scale Flat Slabs Cast From Coarse Recycled Aggregate Concrete** Tadeaš Fecko, Ludmila Kormošová, António Pinho Ramos, Dario Coronelli, Miguel Fernández Ruiz, Robert Vollume, Jaroslav Halvonik	**Detailed Design Optimization of Reinforced Concrete Flexural Sections Using Multi-Objective Genetic Algorithm** Paul Quéva, Ludovic Jason, Gilles Arnaud, Gabriel Sarazin	**Study on structural concretes produced from ACT low-carbon cement and applicability of Eurocode rules** Christian Clergue, François Boutin, Pierre Pimienta		**Proposal of Modular prefab hybrid elements for structural slabs mixing wood and Fiber reinforced concrete with macro synthetic fibres** Giovanni Plizzari, Luca Facconi, Matteo Draconte, Giovanni Spatti, Debora Nezosi, Massimo Berlinghieri, Davide Salghetti	**Steel shear keys for RC balcony-slab joints in internally insulated buildings** Anass El Qoraychi, Mohammad Abdallah, Hugues Somja, Tuan-Anh Nguyen, Romuald Billard	**Investigation of Carbonation of Concrete Based on Crushed Sand and Admixtures** Jacques Herve Koung A Bediang, Elat Assoua Moukete Emmanuel, Djomou Djonga Paul, Mbessa Michel
12:30-14:00	***Lunch & Exhibition (Gould Space)***						

14:00-15:15	Parallel Session 11					
	Amphitheater Antipolis	**Ella Fitzgerald Room**	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**
	Parallel Session 11a Sustainability Chair Michael Haist	**Parallel Session 11b Elevated temperatures and fire Chair Ananth Ramaswamy**	**Parallel Session 11c Durability and corrosion (4/5) Chair Franziska Schmidt**	**Parallel Session 11d Monitoring (2/2) Chair Sylvia Kessler**	**Parallel Session 11e Fibres (2/3) Chair Marco di Prisco**	**Parallel Session 11f Concrete (2/2) Chair Matthieu Briffaut**
14:00-14:15	**Grand Paris Express Line 18 viaduct: an efficient design to reduce carbon emission** Alexandros Giannopoulos, Anthony Scaramozzino	**Comparison between traditional model and hygro-thermal-chemical model of the ballastless track structure at an early age** Mengxuan Ye, Zhiping Zeng, Roman Wan-Wendner	**An increase of corrosion rate when concrete is subjected to both chloride contamination and carbonation compared to individual attack** Huy Tang Bui, Kang Hai Tan	**Monitoring of bridges: a new step is reached by improving the accuracy of instrumented spherical bearings** Cyril Gaucherand, Michal Ambor, Charles Cynober	**Correlation between the Barcelona test and the three-point bending test in steel fibre reinforced concrete** Mustapha Kaoua, Hans Pauwels, Mouna Boumaaza, Benoit De Rivaz, Christophe Justino	**Fatigue tests on large-scale prestressed reinforced concrete beams** Clara Schramm, Aleksei Shmorgun, Dennis Birkner, Raúl Enrique Beltrán Gutiérrez, Steffen Marx
14:15-14:30	**Sustainability assessment of bahareque and reinforced concrete structural systems for social housing** Alid Rocha-Tamayo, Natividad García-Troncoso, Irene Josa, Albert de la Fuente	**Integrated local bond-slip model of reinforcing bar in fibre-reinforced concrete at ambient and elevated temperatures** Christopher Kevinly, Panwei Du, Kang Hai Tan	**The challenge in defining a reliable critical chloride threshold for reinforced concrete service life modelling** Federica Lollini	**A Machine Learning-Driven Framework for Scour Detection in Railway Bridges Using Onboard Sensing** Tola Sinem, Joaquim Tinoco, Eugene J. O'Brien, Jose C. Matos	**Fibre-Reinforced Concrete (FRC): study of the parameters influencing residual flexural tensile strengths** Thomas Duval, Pierre-Yves Hervé, François Jacquemot	**Experimental investigations of the frictional behavior of sawn and shot-blasted concrete surface under various pressure and gap oppenings** Robin Mecka
14:30-14:45	**Impact of new Eurocode 2 over the structural design and environmental sustainability of precast concrete structures** Bruno Dal Lago, Alessio Rimoldi	**Lessons from TELT Lyon-Turin Tunnel Fire Tests: High-Strength Concrete under Extreme Loads and Fire Curve** Takwa Sayari, Mahmoud Abou Dalle, Marie Angelot, Nicolas Bsaibes, Nicola Mazzon, Lionel Linger, Christophe Tessier	**From corrosion assessment to electrochemical re-alkalization of carbonated concrete in a hydroelectric dam : A case-study** Chantal Chalhoub, Stéphane Laurens, Elie Sassine, Stéphane Panin, Dubosc Arnaud	**Height-dependent microstructure of concrete cover in reinforced wall elements using X-ray computed tomography** Milena Kucharska, Piotr Dybeł	**Reinforcement of Beams with Internally Bonded Carbon Fibre Reinforced Polymer** Mehmet Uz, Esra Avci, Yunus Guner, Mustafa Guler	**Numerical analysis of load-bearing behavior with brittle material models: examples for steel- and textile-reinforced concrete and masonry** Jenny Keßler, Carolin Würgau, Daniel Gebauer, Petr Maca, Birgit Beckmann, Jan Cervenka, Steffen Marx
14:45-15:00	**Sustainable Reuseable Hybrid Structural Building System** Alireza Fadai	**Residual compressive strength of EPS lightweight concrete under heating–water cooling regime** Karim Miled, Leila Maghrebi, Hassen Sabeur	**Feasibility study on the in-situ measurement of chloride content using X-ray fluorescence analysis for application in the condition assessment and service life prediction of reinforced concrete structures** Elena Lorenz, Beate Villmann, Ulf Roland, Christian Wagner, Björn Höhlig	**Advanced Continuous Monitoring of Bridge Bearings and Isolators for Enhanced Maintenance Strategies – Real Case Applications** Paola Darò, Monica Longo, Salvatore Ferrara, Dario La Mazza, Sebastiano Cogo, Giuseppe Mancini	**Portland cement free steel fibre reinforced concrete for structural tunnel applications** Marvin Glissner, Carola Edvardsen	**Data-based comparison of former and new Eurocode 2 shear provisions for prestressed members without transverse reinforcement** Sam Coppens, Robby Caspeele, Roman Wan-Wendner
15:00-15:15	**Self-regulating "smart" concretes in sustainable construction** Vyacheslav Falikman	**Micro-indentation investigations in Concrete and Steel exposed to high temperature** Guruprasad Y.K., Ananth Ramaswamy	**Modelling of reinforcement corrosion propagation under fib WP 8.9.2** Carmen Andrade		**Advantages of hybrid RFRC to increase the redundancy of a ribbed slab: an experimental study** Tom Molkens, Tobias Barbier, Rutger Vrijdaghs	**Finite element-based fatigue assessment of reinforced concrete structures subjected to time-series forces** Mohammad Afaghi, Benard Isojeh, Trevor Hrynyk, Anja Klausen, Jan Arve Øverli
15:15-15:45	***Coffee break & Exhibition (Gould Space)***					

15:45-17:00	Parallel Session 12				
	Ella Fitzgerald Room	**Miles Davis Room**	**Louis Armonstrong Room**	**Gould 1 Room**	**Sydney Bechet Room**
	Parallel Session 12a **CFRP** **Chair Agniezska Wiater**	**Parallel Session 12b** **Durability and corrosion (5/5)** **Chair Emmanuel Ferrier**	**SPECIAL SESSION 14** **Carbon Capture and Utilisation by accelerated carbonation of recycled concrete aggregates: results from French Projects** **Chair Philippe Turcry**	**Parallel Session 12c** **Rehabilitation and modifications (2/2)** **Chair Silvia Ientile**	**Parallel Session 12d** **Fibres (3/3)** **Chair Albert de la Fuente**
15:45-16:00	**Strut-and-Tie Model Analysis of Prestress Transfer in Concrete Beams with Pre-Tensioned CFRP Strands** Maria Serrano Mesa, Sebastian Heberling, Lea Maria Wilmsen, Mike Schlaich	**Durability of FRP-to-concrete bonded joints subjected to accelerated aging in laboratory and to field natural aging** Emmanuel Ferrier, Arnaud Gagnon, Corentin Le Roy, Jeremy Roth, Christophe Aubagnac, Emilie Lepretre	**French projects on the CO2 uptake by carbonation of RCA, Turcry Philippe** Torrenti Jean-Michel, Mahieux-Pierre-Yves, Aït-Mokhtar Abdelkarim	**Numerical formulation of the generality envelope** Alessio Pelagalli, Tom Molkens, Laurens Luyten, Lennert Loos	**Statistical Analysis to Assess the Factor Kk,max in SFRC Structures** Ron Kesse, Yuri Karinski, Avraham Dancygier
16:00-16:15	**Structural Performance of CFRP-Reinforced Concrete Beams Using Digital Fabrication Techniques** Sven Engel, Eduarda Dilkin, Martin Classen	**Durability of textile reinforcement made of hemp fibres impregnated with epoxy resin** Sebastian Kuhn, Marcus Ricker, Malte Kaliske, Tânia Feiri	**CO2 uptake by a bed of recycled concrete aggregates crossed by a flow of gas with a high concentration of CO2: influence of temperature and initial water content** Corvec Gaël, Artoni Riccardo, Turcry Philippe, Richard Patrick, Aït-Mokhtar Abdelkarim	**Experimental Study of Effective Desalination Method Using PC T-Girder Specimens** Shoji Nojima, Naoki Hagiwara, Kotaro Honda, Takao Ueda	**Impact of PVA fiber on the mechanical performance of pervious concrete model material with glass beads skeleton** Jie Li, Jun Xia, Luigi Di Sarno, Guobin Gong
16:15-16:30	**Behavior of concrete beams prestressed with CFRP reinforcement under flexural load** Agnieszka Wiater, Dominika Ziaja, Maciej Kulpa, Juliusz Żach, Paweł Studziński, Tomasz Siwowski	**Galecopper Bridge: Securization and replacement of damaged lock-coil cables** Matthieu Guesdon, Janwillem Breider, Nicolas Fabry, Jurgen Jochims, Charlotte Murphy, Reno Couwenberg	**CO2 uptake by accelerated carbonation of recycled concrete aggregates: quantifying bound CO2 by a defined protocol** Pernin Thomas, Cassayre Laurent, Camy Séverine, Jaunkeypersad Kilesh, Kaddah Farah, Corvec Gaël, Jeong Jena, Roziere Emmanuel Turcry Philippe, Artoni Riccardo	**Predicting the Tensile Behavior of TRM composites: A Comparative Study of Established Simplified Models** Christiana Filippou, Marco Carlo Rampini, Marco di Prisco, Christis Z Chrysostomou	**Application of fiber-reinforced concrete in load bearing structures** Chen Lin, Guomin Ji, Terje Kanstad
16:30-16:45	**Effect of multiaxial stress state on the load-bearing capacity of CFRP prestressing strands** Prathamesh Khorgade	**Tenshield, a low carbon filler for post-tensioning tendons** Antoine Carry, Julien Mercier, Laurent Gaillet	**CO2 uptake by accelerated carbonation of recycled concrete aggregates: characterization at the grain scale by tomography and micro-indentation** Kaddah Farah, Lux Jerome, Roziere Emmanuel, Turcry Philippe, Amiri Ouali, Ranaivomanana Harifidy, Ait-Mokhtar Abdelkarim		**Influence of fibres and iron dust on the electrical conductivity of 3D-printed concrete mixes** Eduardo Galeote, Josep Claramunt, Jose Luis Hermida, Albert de la Fuente
16:45-17:00	**Externally bonded CFRP structural strengthening systems – Accelerated resin curing process for rapid return to service** Jean-Roch Lucas, Julien Mercier, Alain Huynh, Sylvain Chataigner		**Parametric and statistical study of RCA and carbonated RCA properties analysed as of a data collection** Braymand Sandrine, Mercado Mendoza Hugo Ramiro, Roux Sébastien		**Fabrication of a textile reinforcement from hemp fibres** Sebastian Kuhn, Paul Penzel, Lars Hahn, Tânia Feiri, Malte Kaliske, Chokri Cherif, Marcus Ricker

	Amphitheater Antipolis
17:00-17:30	**Closure ceremony** **Closing from the co-chairs and the *fib* president** **Presentation of the next *fib* events**