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| **13th fib PhD on line symposium 2020**  Program  (Paris time zone = GMT+2)  Each speaker has 15’ for the presentation of the paper and 10’ for the questions. |  |

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|  | Webinar room A | Webinar room B |
| Wednesday, August 26th 2020 | | |
| 9h30-10h00 | Opening of the symposium  Prof. Jean-Michel Torrenti  Prof. Tor-Ole Olsen  Prof György L. Balázs |  |
| 10h-12h session 1 | Session 1A – Innovation in materials and structures  Chairmen:  Prof György L. Balázs  Prof Sofiane Amziane  Dr Sándor Solyom | Session 1B – structural analysis and design  Chairmen:  Prof. Akio Kasuga  Dr. Briffaut Matthieu  Dr Motohiro Ohno |
| 10h-10h30 | Application of bonding the concrete mixture to reinforcement in steel-concrete composite structures *Olexandr Horb, Yurii Davydenko, Shkurupii Olexandr, Mytrofanov Pavlo* | Masonry strengthening under the combined action of vertical and horizontal forces *Dmytro Usenko, Oksana Dovzhenko, Volodymyr Pohribnyi, Oleksandr Zyma* |
| 10h30-11h | Development of new-generation, biodegradable board thermal insulation *Dániel Csanády, Olivér Fenyvesi* | Model uncertainty quantification for column removal scenario calculations using the energy-based method *Luchuan Ding, Wouter Botte, Ruben Van Coile, Robby Caspeele* |
| 11h-11h30 | Effects of using polypropylene and steel fibres on Ultra High Performance Concrete subjected to elevated temperatures *Ahmed Seyam, Samir Shihada, Rita Nemes* | Characterization of the anisotropic tensile response of UHPFRC *Rui Valente, Aurelio Sine, Mário Pimentel, Sandra Nunes* |
| 11h30-12h00 | Experimental and numerical investigation of bond behaviour of synthetic macro-fibre in concrete *Mantas Garnevičius, Linas Plioplys, Viktor Gribniak* |  |
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| 14h-16h30 | Session 1A – Innovation in materials and structures  Chairmen:  Prof. Harald S. Müller  Dr. Arnaud Perrot  Dr. Joao Pacheco | Session 1B – structural analysis and design  Chairmen:  Prof Tor-Ole Olsen  Bruno Godart  Dr. Graham Webb |
| 14h-14h30 | Experimental investigation of reinforcement strategies for concrete extrusion 3D printed beams *Lukas Gebhard, Jaime Mata-Falcón, Ana Anton, Benjamin Dillenburger, Walter Kaufmann* | Dimensioning Approach of Partially Prestressed Concrete Beams, Optimization of Simply Supported Beams *Abdel Nour Nadim* |
| 14h30-15h | Influence of constant hygric stress on the load-bearing behaviour of high-performance solid absorber made of high-strength fibre concrete *Martin Kiesche, Prof. Dr.-Ing. Matthias Pahn* | Effects of unidirectional tensile stresses on punching shear of RC slabs *Pablo Fernandez, Antonio Mari, Eva Oller, Magi Domingo* |
| 15h-15h30 | Influence of matrix properties and embedded length on the pull-out behaviour of yarns in cement/calcareous filler matrices *Anne-Claire Slama, Jean Louis Gallias, Bruno Fiorio* | Experimental Study on Flexural Behavior of Concrete Girders Prestressed with Stainless Steel Strands *Anwer Al-Kaimakchi, Michelle Rambo-Roddenberry* |
| 15h30-16h | Load-deformation behaviour of concrete tension ties with weft-knitted textile reinforcement *Minu Lee, Jaime Mata-Falcón, Walter Kaufmann* |  |
| 16h-16h30 | Mechanical and mineralogical characteristics of mortars with crushed and river sand *Emmanuel Elat, Albert Noumowé, Prosper Pliya, Alexandre Pierre, Michel Mbessa, Myriam Duc* |  |
| Thursday, August 27th 2020 | | |
| 9h-10h | Keynote: Bernard Mathieu - Concrete in a carbon-neutral economy: an existential challenge!  Chairwoman: Dr. Sandrine Mansoutre | |
| 10h-10h30 | Coffee break | |
| 10h30-12h | Session 1A – Innovation in materials and structures  Chairmen:  Prof. Frank Dehn  Prof. Ahmed Loukili  Dr Nikola Tosic | Session 1B – structural analysis and design  Chairmen:  Prof. Fabrice Gatuingt  Dr. Andreas Sjaastad |
| 10h30-11h | Numerical study on the micro-mechanical behaviour of artificial granular materials *Mohamed Amine Benmebarek, Majid Movahedi Rad* | General method of structural analysis of reinforced concrete columns under axial load and biaxial bending *Bogdan Barylyak, Andrii Pavlikov, Olha Harkava* |
| 11h-11h30 | Residual stiffness analysis of flexural concrete elements with composite reinforcement systems *Haji Akbar Sultani, Viktor Gribniak, Arvydas Rimkus, Lluis Torres, Aleksandr Sokolov* | Impact of Modulus of Elasticity on Deflections of Concrete Structures *Radek Vasatko* |
| 11h30-12h00 | The Applicability of Superabsorbent Polymer as a Protective Carrier in the Bio-based Self-healing Concrete *Hana Schreiberova, Josef Fladr, Alena Kohoutkova, Tomas Trtik, Seps Karel, Zdenek Prosek* |  |
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| 14h-16h30 | Chairmen:  Prof. Petr Hajek  Prof. Olivier Plé  Dr. Vladyslav Shekhotsov | Chairmen:  Prof. Aurelio Muttoni  Dr François Toutlemonde  Dr. Marta del Zoppo |
| 14h-14h30 | Wood Ashes from Electrostatic Filter as a Replacement for the Fly Ashes in Concrete *Piotr-Robert Lazik, Harald Garrecht* | Numerical Plastic Analysis of Non-Prismatic RC Beams Strengthened by CFRP *Sarah Khaleel Ibrahim, Majid Movahedi Rad* |
| 14h30-15h | Sealing of service penetrations in timber buildings with the method wood in wood *Thomas Scherer, Dirk Lorenz, Catherina Thiele* | Punching shear at edge flat slab-column connections *Deema Abu-Salma, Robert Vollum, Lorenzo Macorini* |
| 15h-15h30 | Drying shrinkage and mechanical properties of concrete based on Corbicula shells, from river sediments, as coarse aggregates *Hamza Beddaa, Amor Ben-Fraj, Francis Lavergne, Jean-Michel Torrenti* | Simplification of the procedure for determining the fire resistance of heat insulating brickwork *Heiner Kruse, Catherina Thiele, Christian Glock* |
| 15h30-16h | Influence of the sizes and the loading platform form on the strength of concrete elements at local compression *Iryna Kuznietsova, Oksana Dovzhenko, Volodymyr Pohribnyi, Iryna Usenko* | The change of stress-strain state in biaxial bended reinforced concrete Т-section beams depending on the load *Yuliia Prykhodko, Andrii Pavlikov* |
| 16h-16h30 |  | Bond behavior between high strength concrete and steel reinforcement under high cycle fatigue push-in loading *Homam Spartali, Abedulgader Baktheer, Benjamin Camps, Josef Hegger, Rostislav Chudoba* |
| Friday, August 28th 2020 | | |
| 9h30-12h00 | Session 2A – durability and life assessment  Chairmen:  Prof. Hugo Corres  Prof. Karim Aït-Mokhtar  Dr. Motohiro Ohno | Session 2B – monitoring and structural assessment  Chairmen:  Prof. Joost Walraven  Dr Jean Luc Clément  Dr. Vladyslav Shekhotsov |
| 9h30-10h | Accelerated carbonation of recycled concrete aggregates *Marie Sereng, Assia Djerbi Tegguer, Othman Omikrine-Metalssi, Patrick Dangla, Jean-Michel Torrenti* | Validation of a numerical model for singly reinforced corroded concrete beams *Hussein Nasser, Charlotte Van Steen, Rutger Vrijdaghs, Lucie Vandewalle, Els Verstrynge* |
| 10h-10h30 | Leaching of concrete : a comparison of performance indicators *Aliénor Gauthier, Emmanuel Rozière, Benoit Hilloulin, Ahmed Loukili* | A new assessment methodology for fair-faced concrete surfaces based on digital image processing *Kitti Ajtayné Károlyfi, András Horváth, Ferenc Papp* |
| 10h30-11h | Fracture mechanics parameters in assessment of high strength concrete's frost degradation *Sylwia Borowska, Marta Kosior-Kazberuk* | Carbon-fibred mortar: Effect of sand content and grain size distribution on electrical properties *Hamza Allam, François Duplan, Jean-Pierre Clerc, Sofiane Amziane, Yves Burtschell* |
| 11h-11h30 |  | Transmission length test for prestressing cable after loss of mechanical anchorage *Rafał Walczak* |
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| 14h-15h | Session 2A – durability and life assessment  Chairmen:  Prof. Marco di Prisco  Prof. Farid Benboudjema  Dr Marta del Zoppo |  |
| 14h-14h30 | Numerical Modelling for Reactive Transport due to the Water-dependent Activities within Building Materials *Qingxiang Xiong, Fekri Meftah* |  |
| 14h30-15h | Numerical investigations on the influence of concrete cover on bond behavior of reinforcement in concrete after fire *Arunita Das, Akanshu Sharma, Josipa Bosnjak* |  |
| 15h-16h | Closing ceremony (Jean-Michel)  EFB awards (Sandrine Mansoutre)  MasterBuilders Solutions awards (Vanessa Schueltke)  Fib awards (Tor-Ole Olsen and György L. Balázs.)  & presentation of the 14th fib PhD symposium in Italy (Marco di Prisco) | |