

Program of the 4th *fib* Italy YMG Symposium on Concrete and Concrete Structures

15th -16th September 2025 – Università degli Studi di Napoli Federico II



Day1 (Monday, September 15 th)		<u>Centro Congressi Federico II, Via Partenope 36, Napoli</u>
From	To	
09:00	09:30	Registration
09:30	10:15	Opening Ceremony <i>Chair: Dr. Marta Del Zoppo, fib Italy YMG</i> <i>Prof. Emidio Nigro, Head of Department of DIST University of Naples Federico II</i> <i>Dr. David Fernández-Ordóñez, fib General Secretary</i> <i>Prof. Marco di Prisco, Politecnico di Milano</i> <i>Eng. Enrico Nusiner, CTE</i> <i>Prof. Marco Menegotto, AICAP</i>
10:15	11:00	Keynote lecture: Prof. Andrea Prota, University of Naples Federico II
11:00	11:30	Coffe break
		Session 1: Analysis, design and modelling Chairs: David Fernández-Ordóñez, Simone Labò
		Shear resistance of prestressed FRC beams without stirrups: standard predictions and experimental evidence Matteo Lamberti <i>Leonardo Todisco</i> <i>Rafael Ruiz</i> <i>Miguel Fernández Ruiz</i> <i>Fausto Minelli</i> <i>Hugo Corres</i>
		Numerical prediction of punching shear in post-tensioned steel fibre reinforced concrete elevated slabs Chiara Gaddi <i>Matteo Colombo</i> <i>Marco di Prisco</i>
		Checks on vertical deflections of concrete floor structure: engineering approaches Tomas Hana
11:30		Determination of a 1D Element Stiffness for a Steel-Concrete-Steel Structure Modelling via Plane Element Layering Roman Kubát <i>Petr Bílý</i>
13:45		Evaluation of different approaches for estimating global safety factors in NLNAs of RC beams presenting bending failure mode Elena Miceli <i>Luca Giordano</i> <i>Lucrezia Angelico</i> <i>Giovanni Bono</i> <i>Paolo Castaldo</i>
		Epistemic uncertainties for global NLNAs of RC beams failing in shear Diego Gino <i>Gabriele Neri</i> <i>Lucrezia Angelico</i> <i>Giovanni Bono</i> <i>Luca Giordano</i>
		Behavior of structural and non-structural elements for seismic loss assessment Giuseppe Elettore
		Thermo-mechanical modelling of reinforced concrete elements: SAFIR vs. OpenSees comparison Sara Minieri <i>Antonio Cibelli</i> <i>Donatella de Silva</i> <i>Fabio De Simone</i> <i>Emidio Nigro</i>
		Fire Performance of Fiber-Reinforced Concrete Tunnels: A review Nunzia Gargiulo <i>Francesco Dionisio</i> <i>Donatella de Silva</i> <i>Emidio Nigro</i>
13:45	14:45	Lunch break

Supporters:



		Session 2: Innovation in concrete construction	
		Chair: Fabio Granata, Giuseppe Ferrara	
		Direct tensile test on Reinforced 3D-Printed Concrete ties	
		Lucia Licciardello Hedwige Meillasson Alejandro Giraldo Soto Walter Kaufmann	
		The Role of Interlayer Interfaces in 3D-Printed Elements: A Nonlinear FEM-Based Study	
		Gianluca Giulivo Costantino Menna	
		Influence of Recycled Aggregates on fresh and hardened properties of 3D printable concrete mix	
		Daniele Berdini Jacopo Donnini Roberto Cognoli Marco Galasso Nicola Generosi Valeria Corinaldesi	
14:45	16:15	State-of-the-Art Review on Longitudinal Shear Behaviour of Recycled Aggregate Concrete Composite Slabs: Case Studies and Design Insights	
		Marta Saccone Flavio Stochino Marco Zucca Marco Simoncelli	
		An innovative compression-dominant structural system for carbon-negative buildings: An overview of EIC Pathfinder project 'CARBCOMN'	
		Denis Ayena Lorika Yi Zhang Maximilian Löher Panagiotis Gkournelos Sandro Sanin Lori Zillante Monica Palladino Thinh Nguyen Rosario Lombardi Daniele Florenzano Alessandro Dell'Endice Saim Raza Zohaib Hassan Julien Michels Vishu Bhooshan	
		2-phase hygro-thermo-chemical model to simulate the effect of aggregate and binder properties on transport phenomena	
		Antonio Cibelli Jelle Billiet Jan Vorel Giovanni Di Luzio Roman Wan-Wendner	
16:15	16:45	Coffe break	
		Session 3: Diagnosis, in-situ and remote monitoring	
		Chairs: Marco di Prisco, Paolo Castaldo	
		Core-drilling techniques for prestressing residual stress diagnostics in prestressed concrete decks	
		Chiara Galatà Davide Messina Dario De Domenico Antonino Recupero Edoardo Proverbio	
		Design of a vibration-based monitoring system for a reinforced concrete arch bridge	
		Alessio De Corso Ilenia Rosati Carlo Rainieri	
		Investigating the relationship between cracking damage and acoustic emission entropy in ordinary RC beams	
		Danilo D'Angela Gennaro Magliulo Dario Chiacchia Marta Del Zoppo Marco Di Ludovico Alberto Monici Andrea Prota	
		Vibration diagnosis of reinforced concrete structures: consideration of damage propagation	
16:45	18:45	Fatma Guidara Mohamed Saidi Jean-Patrick Plassiard William Rodriguez	
		Stress release method for in situ prestress evaluation: experimental program on simplified reinforced concrete columns	
		Giulia Rossini Stefano G. Mantelli Fausto Minelli	
		Experimental investigation of the structural impact of artificial corrosion on concrete dapped-end beams	
		Paolo Pizzini Luca Facconi Nico Di Stefano Fausto Minelli Giovanni Plizzari	
		Use of AI for Integrated Structural Monitoring & Inspections	
		Antonio Bilotta Ali Siddique Vittorio Prodomo Ivan Di Cristinzi Federico Di Carlo Giovanni Crisci Maria Rosaria Pecce	
		Brittle Collapse of a Massive Concrete Element During Handling: Experimental and Numerical Investigation	
		Marinella Fossetti Luigi Coppola Marco Morreale Alfio Francesco Siciliano Denny Coffetti Angelo Mulone Renato Giarrusso Gianluca Ievolella	
20:00	-	Social Dinner at Locanda Del Cerriglio*	

*The participation fee for the social dinner is 40 €, to be paid on the conference website

Day2 **Centro Congressi Federico II, Via Partenope 36, Napoli**

Supporters:



(Tuesday, September 16 th)		
From	To	
09:15	10:00	Keynote lecture: Dr. Michele W. T. Mak, University of Leeds
		Session 4: Durability & Sustainability Chair: Simona Bianchi, Simone Spagnuolo
		Genetic algorithm framework for environmentally sustainable and cost-efficient seismic retrofitting design of reinforced concrete structures Antonio P. Sberna Fabio Di Trapani
		Analytical model for shear strength of FRP-reinforced RC beams Piero Colajanni Calogero Cucchiara Jennifer D'Anna
		Durability of PBO-FRCM systems: effects of wet and dry cycles and immersion in "ocean water" Raffaele Nudo Mariachiara Petrolini Marco Tanganelli
10:00		Morphological analysis and physical characterization on bio-coated natural fibre for structural applications: a preliminary study Bruno Paolillo Marco Pepe Eddie Koenders Enzo Martinelli
11:45		Wood ash based alkali-activated materials Rosa De Michele Barbara Liguori Domenico Caputo Costantino Menna
		Carbonated industrial by-products as cement substitute: comparison with conventional supplementary cementitious materials Francesca Bonfante Pedro Humbert Davide Garufi Jean-Marc Tulliani Paola Palmero Giuseppe Ferrara
		Effect of Application Conditions and Weathering on the Performance of Silane-Based Treatments for Concrete Simone Rapelli Denny Coffetti Luigi Coppola
11:45	12:15	Coffe break
		Session 5: Existing structures Chairs: Michele W.T. Mak, Diego Talledo
		Nonlinear dynamic analyses of a typical highway overpass under seismic conditions Davide Messina Daniele Giunta Eugenio Chioccarelli Antonino Recupero
		Nonlinear modelling of reinforced concrete elements for vulnerability assessment of structures under different risks Mariano Di Domenico Paolo Ricci Gerardo M. Verderame
		Comparative earthquake-induced impact assessment of Italian precast concrete structures Margherita Buttazzoni Martina Caruso Francesco Cavalieri Davide Bellotti Roberto Nascimbene
12:15		Safety assessment of prestressed reinforced concrete bridge decks through non-linear finite element analysis Mario Ferrara Elena Miceli Diego Gino
13:45		Development of a Mechanically informed Machine Learning framework to guide risk assessment of existing Pre-1970s RC Buildings Edoardo Sette Michele Matteoni Livio Pedone Stefano Pampanin
		Flexural response of reinforced concrete beams affected by internal swelling reactions: analysis and interpretation of experimental studies Alberto Stella Luisa Berto Fabio Di Carlo Alberto Meda Zila Rinaldi Anna Saetta Simone Spagnuolo Diego Alejandro Talledo
13:45	14:45	Lunch break
		Session 6: Innovative materials Chairs: Ciro Del Vecchio, Giuseppe Melcangi
14:45		Structural behavior of optimised steel fibre reinforced elements loaded according to a double splitting configuration Giulia Brentana Filippo Medeghini Ivan Trabucchi Giuseppe Tiberti Giovanni A. Plizzari Peter Mark
16:15		

Supporters:



Fatigue behavior of thermoplastic-resin glass fiber-reinforced polymer (GFRP) bars

Alessandro Cagnoni | Veronica Bertolli | Marco Andrea Pisani | Tommaso D'Antino

Behaviour of hybrid reinforced concrete beams under serviceability conditions

Pietro Mazzuca | Matteo Mauro | **Francesco Campolongo**

Effect of Fiber Orientation in Ultra-thin HPFRC Repair

Ivan Beltracchi | Adriano Reggia | Ivan Trabucchi | Giovanni Metelli | Giovanni A. Plizzari

Numerical Evaluation of Hybrid FRP-Steel Systems: Enhancing Ductility and Corrosion Resistance in Concrete Beams

Matteo Mauro | Francesco Campolongo | Pietro Mazzuca

16:15	16:45	Coffe break
16:45	17:30	Awards and Closing ceremony Chair: Marta Del Zoppo

Sponsor Gold



Sponsor Premium



Sponsor Standard



Supporters:

