

### Comitato scientifico \_ *scientific committee*

Kalle Kähkönen	Tampere University of Technology (chair)
Angelo Ciribini	Università di Brescia (co-chair)
Berardo Naticchia	Università Politecnica delle Marche (co-chair)
Chris Harty	University of Reading, UK
John Heintz	TU Delft, The Netherlands
Rafael Sacks	Technion, Israel
Ernesto Antonini	Università di Bologna
Andrea Boeri	Università di Bologna
Riccardo Gulli	Università di Bologna
Pietro Capone	Università di Firenze
Alessandro Carbonari	Università Politecnica delle Marche
Giuseppe Di Giuda	Politecnico di Milano
Fulvio Re Ceconi	Politecnico di Milano
Marco Bragadin	Università di Bologna
Valentina Villa	Politecnico di Torino
Lavinia Tagliabue	Università di Brescia
Vito Getuli	Università di Firenze

### Organizzatori \_ *organizers*

Alma Mater Studiorum Università di Bologna  
Dipartimento di Architettura - Cesena  
Scuola Superiore di Studi Sulla Città e il Territorio - Ravenna  
Fondazione Flaminia - Ravenna

### Destinatari \_ *target audience*

Operatori del settore, professionisti, aziende, ricercatori  
*Construction sector operators, professionals, firms, researchers*

### Finalità \_ *target*

Definizione degli aspetti innovativi e dei settori di ricerca  
per il construction management  
*Research fields for innovation and research  
in construction management*

Con il patrocinio di:



in collaborazione con:



### Partecipanti / *Audience*

La partecipazione al workshop è gratuita, previa registrazione  
Si prega di mandare un email:  
[crossi@fondazioneflaminia.it](mailto:crossi@fondazioneflaminia.it)

Per gli ingegneri saranno riconosciuti 3 CFP per la partecipazione  
all'intera durata di ciascuna sessione del workshop  
(totale CFP 3+3+3, quindi 9)

Per il riconoscimento dei CFP per Ingegneri  
è necessario iscriversi sul portale [www.isinformazione.it](http://www.isinformazione.it)  
e ricercare l'evento per la propria categoria

### Segreteria scientifica \_ *Scientific secretariat*

Marco Alvise Bragadin  
Università di Bologna  
e-mail: [marcoalvise.bragadin@unibo.it](mailto:marcoalvise.bragadin@unibo.it)

### Segreteria organizzativa \_ *Workshop secretariat*

Carla Rossi  
Fondazione Flaminia  
e-mail: [crossi@fondazioneflaminia.it](mailto:crossi@fondazioneflaminia.it)

<https://eventi.unibo.it/constructionmanagement-workshop-2018>



DIPARTIMENTO DI ARCHITETTURA



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA  
SCUOLA SUPERIORE DI STUDI SULLA CITTÀ E IL TERRITORIO



FONDAZIONE FLAMINIA  
PER L'UNIVERSITÀ  
IN ROMAGNA

# New Frontiers of Construction Management

## WORKSHOP 2018



8-9 novembre duemiladiciotto

Ravenna - Italy - Via Tombesi dall'Ova, 55

## Thursday 8<sup>th</sup> of November 2018

08.30 am Registrazione dei partecipanti / *Registration open*  
09.15 am Saluti delle autorità / *Welcome address*

**Presentazione del Workshop / *Workshop Presentation***  
Kalle Kähkönen / Marco Bragadin

09.30 am-13.00 am **WORKSHOP I<sup>^</sup> SESSION**  
**Chairman: Kalle Kähkönen**

09.30-10.00 **Keynote: Using BIM and digital technologies for construction management**  
Chris Harty

10.00-10.45 **IoT and perspectives for the creation of Smart Factory in the construction sector**

**Digitalization in the real estate and construction sector**  
Marko Keinanen

**A spatio-temporal perspective to knowledge management in the construction sector**  
Claudio Mirarchi

**A theoretical framework to align Lean Construction techniques in the 4.0 building industry**  
Gabriele Novembri, Francesco Livio Rossini and Antonio Fioravanti

11.00 am-11.15 am Coffee break

11.15-12.00 **Project Management & Lean Construction: innovative technologies and Lean Construction with the aim of time, cost, quality and safety in construction**

**Planning, scheduling and controlling long term projects**  
Gianluca di Castri

**A Project Framework to introduce Virtual Reality in Construction Health and Safety**  
Vito Getuli, Tommaso Giusti and Pietro Capone

**Using Genetic Algorithms for optimizing and modelling Time, Cost and Quality trade-offs of construction projects**  
Marco Bragadin, Kalle Kähkönen and Andrea Ballabeni

12.30 am Lunch break (invited speakers)

14.00 pm-18.00 pm **WORKSHOP II<sup>^</sup> SESSION**  
**Chairman: Kalle Kähkönen**

14.00-14.30 **Keynote: Project Management capabilities for a Disruptive Future**  
John L. Heintz

14.30-16.00 **Building Information Modelling & Built Heritage: BIM for the new building construction site design and for renovation and conservation projects – HBIM**

**Framework agreement and collaborative procurement in Italian legislation enhancing a BIM approach**  
Giuseppe Martino Di Giuda and Gian Luigi Albano

**Unmanned Aerial Vehicle (UAV) and Building Information Modelling (BIM) technologies in concrete dam management: the case of Ridracoli**  
Giulia Buffi, Piergiorgio Manciola, Andrea Gambi and Giuseppe Montanari

**Innovative approach to the configuration of smart buildings**  
Rossana Paparella and Mauro Caini

**Digital renovation: BIM for the built environment**  
Simone Garagnani

**Knowledge methods and instruments to extend the service life of historic timber roofs**  
Davide Prati, Luca Guardigli and Giovanni Mochi

16.00 am-16.15 am Coffee break

16.15-17.00 **Facility Management & Life Cycle Planning**

**Cost-oriented tool for life cycle planning**  
Maurizio Nicoletta, Alessio Pino and Luigi Coppola

**LCA and LCC analysis for the programming of sustainable interventions on building heritage**  
Claudio Scognamiglio

**BIM-based H&S management for Facilities Operations & Maintenance of logistic plants**  
Valentina Villa, Alberto Lauria and Carlo Caldera

17.00-18.00 **Health and Safety in Construction Project Management**

**Multi-dimensional risk assessment**  
Ugo Di Camillo

**Asbestos hazards analysis in construction projects with the Fault Tree Analysis (FTA) and the Failure Mode and Effect Analysis (FMEA)**  
Sara Marchello

**Proposal of guidelines for the general construction site plan for the reconstruction of a historic earthquake city: the case of L'Aquila**  
Serena Di Marco

Industry Speaker: **Teamsystem**

18.00 pm: **Discussion and public debate for closure**

20.30 Social dinner (invited speakers)

## Friday 9<sup>th</sup> of November 2018

09.00am: Registrazione dei partecipanti / *Registration open*

09.30 am – 13.00 am **WORKSHOP III<sup>^</sup> SESSION**  
**Chairman: Marco Bragadin**

09.30-10.00 **Keynote: Limits and potentiality of digitalization in the construction sector**  
Angelo Ciribini

10.00-10.15 **Cluster Build – Innovation and scenarios for the construction sector**  
Giulia Landriscina

10.15 am-10.30 am Coffee break

10.30-11.30 **Building Information Modelling & Built Heritage: BIM for the new building construction site design and for renovation and conservation projects – HBIM**

**A BIM-based IoT approach to the Construction Site Management**  
Lavinia Chiara Tagliabue and Angelo Luigi Camillo Ciribini

**LCA analysis through a Visual Programming tool: workflow on a BIM model case study**  
Stefano Politi, Giacomo Bergonzoni, Ivan Walter Junior Cincotta and Fabrizio Sampietro

**A literature review on measurement of digitalisation of the AECO industry**  
Nicola Moretti and Paolo Ettore Giana

**IFC-based maintenance budget allocation**  
Sebastiano Maltese, Giovanni Branca, Fulvio Re Cecconi and Nicola Moretti

Industry Speaker: **Harpaceas**

11.30 **Lectio Magistralis / Keynote closure:**  
*Presentazione della Lezione Magistrale / Presentation of Lectio Magistralis*

**Need for modern multidisciplinary research and developments to change the built environment sector**  
Kalle Kähkönen

13.00 *Discussione e chiusura del workshop / Public debate and workshop closure*

13.30 Lunch (invited speakers)