

17th International Conference of the International Building Performance Simulation Association (BS 2021)

Bruges, Belgium
1 – 3 September 2021

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Detailed Program

Tuesday, 31/Aug/2021

8:00	Opening registration desk
-	Location: Cityhall (Belfry)
9:00	The registration desk will open at 08:00, and will remain open until 19:30.
9:00	Workshop 2: Urban Energy Lab 4.0 - An integrated step towards a sustainable future of city districts
-	Location: Cityhall (Belfry) - Room 2
10:30	Chair: Christian Vering , RWTH Aachen University Chair : Dirk Müller , RWTH Aachen
10:30	Workshop 4: Introduction to statistical learning - application to building energy data analysis
-	Location: Cityhall (Belfry) - Room 3
12:30	Chair: Simon Rouchier , Université Savoie Mont Blanc
11:00	Workshop 3: SIM-VICUS - A new and open source approach for dynamic Building Energy Performance Simulation
-	Location: Cityhall (Belfry) - Room 2
12:30	Chair: Stephan Hirth , TU Dresden
13:30	Workshop 1: Introduction to the BOPTTEST framework for simulation-based benchmarking of advanced controllers
-	Location: Cityhall (Belfry) - Room 1
17:00	Chair: Javier Arroyo , KU Leuven
14:00	Technical tour: Lam Gods: Technical tour: Lam Gods
-	Location: Sint-Baafs Cathedral
17:00	
19:30	Keynote Ardeshir Mahdavi - The Sound of Space: Reflections on Architecture, Acoustics, and Music
-	Location: Cityhall (Belfry)
20:15	Chair: Dirk Saelens , KU Leuven / EnergyVille
20:15	Awarding Ceremony for the winner of the Music Competition
-	Location: Cityhall (Belfry)
20:45	Chair: Dirk Saelens , KU Leuven / EnergyVille
	Frank Deleu will talk about the Carillon at the Belfry. Awarding ceremony for the winner of the music competition. Wim Berteloot will play the winning composition on the Carillon.
20:45	Welcome Reception
-	Location: Cityhall (Belfry)
22:00	

Wednesday, 01/Sept/2021

7:00	Opening registration desk								
-	Location: Concert Hall								
8:30	The registration desk will open at 07:00, and will remain open until 20:00.								
8:30	Plenary Opening Ceremony								
-	Location: Concert Hall - Concertzaal								
9:00	Chairs: Lieve Helsen , KU Leuven / Energyville and Wim Boydens , boydens engineering, part of Sweco / Ghent University Conference Opening - Food for thoughts IBPSA and IBPSA NVL Welcome words (Lori McElroy and Dirk Saelens) Opening Innovation Speech by Minister of Innovation Hilde Crevits								
9:00	Keynote: Thoughts of leading Industry by Martin Dieryckx, General Manager Environmental Research Center Daikin Europe								
-	Location: Concert Hall - Concertzaal								
9:15									
9:15	Keynote: Climate Change, The European Green Deal and the Building sector by Jos Delbeke - former Director-General of the European Commission's DG Climate Action								
-	Location: Concert Hall - Concertzaal								
10:00									
10:00	Coffee Break								
-	Location: Concert Hall - Foyers								
10:30									
10:30	Session W1.1: Practice and industry related case studies	Session W1.2: Student Modelling Competition: Can we build a building without HVAC and achieve good comfort in Belgium (like 2226 in Austria)?	Session W1.3: Buildings paving the way for the energy transition	Session W1.4: Climate change and bioclimatic design	Session W1.5: The role of occupants	Session W1.6: Improving indoor environmental quality	Session W1.7 (Online Track): Ensuring high quality building simulations	Session W1.8 (Online Track): Buildings paving the way for the energy transition	Session W1.9 (Online Track): Ensuring high quality building simulations/BIM
-	Location: Concert Hall - Forum 6	Location: Concert Hall - Artiesterfoyer	Location: Concert Hall - Studio 1	Location: Concert Hall - Studio 2	Location: Concert Hall - Kamermuziekzaal	Location: Concert Hall - Concertzaal	Location: Virtual Meeting Room 1	Location: Virtual Meeting Room 2	Location: Virtual Meeting Room 3
12:00	Chair: Mathias Bouquerel	Chair: Elisa Van Kenhove	Chair: Wilfried GJHM van Sark	Chair: Georgios Kyriakodis	Chair: Fabian Ochs	Chair: Hilde Breesch			
	Chair : Thomas Bockelandt	Chair: Elisa Van Kenhove	Chair : Eric Deen	Chair : Jérôme Le Dréau		Chair : Dimitrov Bolashikov			
12:00	Lunch								
-	Location: Foyers (Concert Hall) and 'het Zand' square outside (front of building)								
13:00									
13:00	Session W2.1: Practice and industry related case studies	Session W2.2: Ensuring high quality building simulations	Session W2.3: Buildings paving the way for the energy transition	Session W2.4: Climate change and bioclimatic design	Session W2.6: The role of occupants	Session W2.7 (Online Track): Ensuring high quality building simulations	Session W2.8 (Online Track): Buildings paving the way for the energy transition	Session W2.9 (Online Track): Improving indoor environmental quality	
-	Location: Concert Hall - Forum 6	Location: Concert Hall - Artiesterfoyer	Location: Concert Hall - Studio 1	Location: Concert Hall - Studio 2	Location: Concert Hall - Kamermuziekzaal	Location: Virtual Meeting Room 1	Location: Virtual Meeting Room 2	Location: Virtual Meeting Room 3	
14:30	Chair: Dorota Brzezińska	Chair: Laura Carnieletto	Chair: Alessia Arteconi	Chair: Shady Attia	Chair: Andrea Gasparella				
	Chair : Friedl Decock	Chair : Frederik Maertens	Chair : Alain Heeren	Chair : Yasuyuki Shiraishi	Chair : Damien Picard				

14:40 - 16:10	Session W3.1: Practice and industry related case studies Concert Hall - Forum 6 Location: Concert Hall - Forum 6 Chair: Jeffrey Spitler Chair : Anna Bortkiewicz	Session W3.2: Ensuring high quality building simulations Location: Concert Hall - Artiestenfoyer Chair: Steffen Petersen Chair : Kristof Vlieghe	Session W3.3: Buildings paving the way for the energy transition Location: Concert Hall - Studio 1 Chair: Dariusz Heim Chair : Sorin Comsa	Session W3.4: Historical and heritage buildings Location: Concert Hall - Studio 2 Chair: Staf Roels Chair : Wouter Van de Walle	Session W3.5: Improving indoor environmental quality Location: Concert Hall - Kamermuziekzaal Chair: Natalia Giraldo Vasquez Chair : Jean-Baptiste BOUVENOT	Session W3.7 (Online Track): Ensuring high quality building simulations Location: Virtual Meeting Room 1	Session W3.8 (Online Track): The role of occupants Location: Virtual Meeting Room 2	Session W3.9 (Online Track): Buildings paving the way for the energy transition Location: Virtual Meeting Room 3
16:10 - 16:40	Short break Location: Concert Hall - Foyers							
16:40 - 17:10	IBPSA Fellows & Awards Location: Concert Hall - Concertzaal Chair: Michael Kummert							
17:10 - 18:00	Keynote: Are “Low-Tech” buildings like the ‘2226’ a solution towards climate neutrality? by Lars Junghans - Associate Professor at the University of Michigan’s Taubman College of Architecture and Urban Planning Location: Concert Hall - Concertzaal This keynote lecture will be followed by the Student Modelling Competition Award .							
18:00 - 18:30	Keynote: Thoughts of leading Industry in the heart of the energy transition, by Leonie Assheuer, EU Affairs Manager at Viessmann Location: Concert Hall - Concertzaal							
18:30 - 19:00	Short Break							
19:00 - 19:10	Opening evening session by Dirk De Fauw, Mayor of Bruges Location: Concert Hall - Concertzaal							
19:10 - 19:45	Keynote: Sustainable architecture is a conscious and sound approach, by Nguyen Hoang Manh - founder of MIA Design Studio, Vietnam Location: Concert Hall - Concertzaal							
19:45 - 20:10	Keynote: Vision of a leading global engineering company, towards transforming society together, by Andreas Gyllenhammar CSO ‘Chief Sustainability Officer’ of SWECO group (to be confirmed) Location: Concert Hall - Concertzaal							
20:10 - 21:30	Food for body - Networking dinner Location: Concert Hall - Foyers							
21:30 - 23:00	Food for soul - concert: young talents ... promising a bright future ahead Location: Concert Hall performed by Emmy d’Arc, Sam De Nef and band							

Thursday, 02/Sept/2021

8:30 - 10:00	<p>Session T1.1: Practice and industry related case studies Location: Cityhall (Belfry) - Room 1 Chair: Mathias Bouquerel Chair : Jeroen Van der Veken</p>	<p>Session T1.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Thierry Duforestel</p>	<p>Session T1.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Wilfried GJHM van Sark</p>	<p>Session T1.4: Improving indoor environmental quality Location: Cityhall (Belfry) - Room 4 Chair: Dariusz Heim Chair : Hayder Alsaad</p>	<p>Session T1.5: Climate change and bioclimatic design Location: Crowne Plaza - De Burgh Room Chair: Laura Carnieletto</p>	<p>Session T1.6: Ensuring high quality building simulations Location: Crowne Plaza - Arnulf Room Chair: Jérôme Le Dréau</p>			
10:00 - 10:30	<p>Coffee Break Location: Belfry</p>								
10:30 - 12:00	<p>Session T2.1: Practice and industry related case studies Location: Cityhall (Belfry) - Room 1 Chair: Eline Himpe</p>	<p>Session T2.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Frank De Troyer Chair : Nils Artiges</p>	<p>Session T2.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Alessia Arteconi</p>	<p>Session T2.4: Improving indoor environmental quality Location: Cityhall (Belfry) - Room 4 Chair: Catherine Gorle Chair : Massimo Palme</p>	<p>Session T2.5: Climate change and bioclimatic design Location: Crowne Plaza - De Burgh Room Chair: Francesco De Luca Chair : Georgios Kyriakodis</p>	<p>Session T2.6: Ensuring high quality building simulations Location: Crowne Plaza - Arnulf Room Chair: Jeffrey Spittler</p>	<p>Session T2.7 (Online Track): Ensuring high quality building simulations Location: Virtual Meeting Room 1</p>	<p>Session T2.8 (Online Track): Buildings paving the way for the energy transition Location: Virtual Meeting Room 2</p>	<p>Session T2.9 (Online Track): Practice and industry related case studies Location: Virtual Meeting Room 3</p>
12:00 - 13:30	<p>Lunch Location: Belfry</p>								
13:30 - 15:00	<p>Session T3.1: Practice and industry related case studies Location: Cityhall (Belfry) - Room 1 Chair: Joel Neymark Chair : Jacopo Vivian</p>	<p>Session T3.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Dorota Brzezińska</p>	<p>Session T3.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: James O'Donnell</p>	<p>Session T3.4: Improving indoor environmental quality Location: Cityhall (Belfry) - Room 4 Chair: Hilde Breesch Chair : Ricardo Forgiarini Rupp</p>	<p>Session T3.5: Ensuring high quality building simulations Location: Crowne Plaza - De Burgh Room Chair: Jelle Laverge Chair : Benjamin Kadoch</p>	<p>Session T3.6: The role of occupants Location: Crowne Plaza - Arnulf Room Chair: Romana Markovic Chair : Mathieu Schumann</p>	<p>Session T3.7 (Online Track): Ensuring high quality building simulations Location: Virtual Meeting Room 1</p>	<p>Session T3.8 (Online Track): Climate change and bioclimatic design Location: Virtual Meeting Room 2</p>	<p>Session T3.9 (Online Track): Improving indoor environmental quality Location: Virtual Meeting Room 3</p>
15:00 - 16:30	<p>Session T4.1: Ensuring high quality</p>	<p>Session T4.2: Ensuring high quality</p>	<p>Session T4.3: Buildings paving the way</p>	<p>Session T4.4: Improving indoor environmental quality</p>	<p>Session T4.5: Meet the peers Location: Crowne Plaza</p>	<p>Session T4.6: The role of occupants Location:</p>	<p>Session T4.7 (Online Track): Practice</p>	<p>Session T4.8 (Online Track): Climate</p>	<p>Session T4.9 (Online Track): Ensuring high quality</p>

	building simulations Location: Cityhall (Belfry) - Room 1 Chair: Agnese Salvati Chair : Hicham Johra	building simulations Location: Cityhall (Belfry) - Room 2 Chair: Alessandro Dama Chair : Jérôme Le Dréau	for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Elli Nikolaidou Chair : Vojtech Zavrel	Location: Cityhall (Belfry) - Room 4 Chair: J. Alstan Jakubiec Chair : Hayder Alsaad	- De Burgh Room Chair: Elisa Van Kenhove Presenters: Bjarne Olesen, Lieve Helsen, Catherine Gorle and Jeffrey Spittler	Crowne Plaza - Arnulf Room Chair: Jérôme Le Dréau Chair : Chantal Basurto	and industry related case studies Location: Virtual Meeting Room 1	change and bioclimatic design Location: Virtual Meeting Room 2	building simulations Location: Virtual Meeting Room 3
16:30	Coffee Break								
-	Location: Belfry								
17:00									
17:00	Session T5.1:	Session T5.2:	Session T5.3:	Session T5.4:	Session T5.5:	Session T5.6:	Session T5.7	Session T5.8	Session T5.9
-	Buildings paving the way for the energy transition	Ensuring high quality building simulations	Buildings paving the way for the energy transition	Improving indoor environmental quality	Ensuring high quality building simulations	Buildings paving the way for the energy transition	(Online Track): Ensuring high quality building simulations	(Online Track): The role of occupants	(Online Track): Ensuring high quality building simulations
18:30	Location: Cityhall (Belfry) - Room 1 Chair: James O'Donnell	Location: Cityhall (Belfry) - Room 2 Chair: Andreas Nicolai	Location: Cityhall (Belfry) - Room 3 Chair: Christoph Nytsch-Geusen	Location: Cityhall (Belfry) - Room 4 Chair: Shady Attia Chair : Massimo Palme	Location: Crowne Plaza - De Burgh Room Chair: Fabian Ochs	Location: Crowne Plaza - Arnulf Room Chair: Catherine Gorle	Location: Virtual Meeting Room 1	Location: Virtual Meeting Room 2	Location: Virtual Meeting Room 3
18:30	Free time								
-									
19:30									
19:30	Conference Dinner								
-	Location: Brewery Halve Maan								
23:00									

Friday, 03/Sept/2021

8:30 - 10:00	Session F1.1: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 1 Chair: Thierry Duforestel , EDF R&D	Session F1.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Andrea Gasparella , Free University of Bozen - Bolzano Chair : Aurelien Bres , AIT Austrian Institute of Technology	Session F1.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Eline Himpe , Ghent University	Session F1.4: Practice and industry related case studies Location: Cityhall (Belfry) - Room 4 Chair: Romana Markovic , KIT			
10:00 - 10:30	Coffee Break Location: Cityhall (Belfry)						
10:30 - 12:00	Session F2.1: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 1 Chair: Jacopo Vivian , University of Padua Chair : Jelle Laverge , Ghent University	Session F2.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Joel Neymark , J. Neymark & Associates Chair : Ádám Bognár , Eindhoven University of Technology	Session F2.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Tarek Rakha , Georgia Institute of Technology Chair : Yasuyuki Shiraishi , The University of Kitakyushu	Session F2.4: The role of occupants Location: Cityhall (Belfry) - Room 4 Chair: Natalia Giraldo Vasquez , Federal University of Santa Catarina Chair : Mathieu Schumann , EDF	Session F2.5 (Online Track): Practice and industry related case studies Location: Virtual Meeting Room 1	Session F2.6 (Online Track): Improving indoor environmental quality Location: Virtual Meeting Room 2	Session F2.7 (Online Track): Buildings paving the way for the energy transition / optimisation /control Location: Virtual Meeting Room 3
12:00 - 13:30	Lunch Location: Belfry						
13:30 - 15:00	Session F3.1: Improving indoor environmental quality Location: Cityhall (Belfry) - Room 1 Chair: J. Alstan Jakubiec , University of Toronto Chair : Ricardo Forgiarini Rupp , Technical University of Denmark	Session F3.2: Ensuring high quality building simulations Location: Cityhall (Belfry) - Room 2 Chair: Andreas Nicolai , TU Dresden	Session F3.3: Buildings paving the way for the energy transition Location: Cityhall (Belfry) - Room 3 Chair: Elli Nikolaidou , University of Bath	Session F3.4: Climate change and bioclimatic design Location: Cityhall (Belfry) - Room 4 Chair: Vojtech Zavrel , CTU in Prague, Faculty of Mechanical Engineering Chair : Sammy Rogmans , Sweco	Session F3.5 (Online Track): Practice and industry related case studies Location: Virtual Meeting Room 1	Session F3.6 (Online Track): Ensuring high quality building simulations Location: Virtual Meeting Room 2	Session F3.7 (Online Track): The role of occupants Location: Virtual Meeting Room 3
15:00 - 16:30	Session F4.1: Improving indoor environmental	Session F4.2: Ensuring high quality building simulations	Session F4.3: Buildings paving the way for the energy	Session F4.4: Climate change and bioclimatic design	Session F4.5 (Online Track): Practice and industry related	Session F4.6 (Online Track): Ensuring high quality building	Session F4.7 (Online Track): Improving

	quality Location: Cityhall (Belfry) - Room 1 Chair: Alessandro Dama , Politecnico di Milano Chair : Ádám Bognár , Eindhoven University of Technology	Location: Cityhall (Belfry) - Room 2 Chair: Nils Artiges , Univ. Grenoble Alpes, CNRS, Grenoble INP, G2Elab, F-38000 Grenoble, France	transition Location: Cityhall (Belfry) - Room 3 Chair: Steffen Petersen , Aarhus University Chair : Jeroen Van der Veken , BBRI	Location: Cityhall (Belfry) - Room 4 Chair: Tarek Rakha , Georgia Institute of Technology Chair : Chantal Basurto , Idiap Research Institute	case studies Location: Virtual Meeting Room 1	simulations Location: Virtual Meeting Room 2	indoor environmental quality Location: Virtual Meeting Room 1
16:30 -	Closing Session with Award Ceremony						
17:30	Location: Cityhall (Belfry) Chair: Lieve Helsen , KU Leuven Chair : Wim Boydens , boydens engineering / UGent						
	BS2021 Awards (Michael Kummert, Jelle Laverge, Friedl Decock) BS2021 thanks and final remarks (Paul Strachan, Dirk Saelens, Lieve Helsen, Wim Boydens) IBPSA Announcements (Paul Strachan) Adjourn (Lori McElroy)						
17:30 -	Last toast towards a long lasting taste of Bruges						
18:00	Location: Cityhall (Belfry)						