BAS 2026 Hong Kong

The International Conference of Building And Simulation

Theme: Climate neutral buildings and cities

Programme

June 11-13, 2026

Hong Kong SAR, China

Organizer

香港科技大學
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

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土木及環境工程學系
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Asian Universities Alliance

Contents

BAS 2026

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Conference Venue

■ The Hong Kong University of Science and Technology (HKUST)

HKUST occupies a stunning 150-acre site overlooking the pristine Clearwater Bay, located on the Sai Kung Peninsula. The area is often considered as one of Hong Kong's havens for outdoor lovers.

HKUST is a publicly funded university that opened in 1991. It is a leading international research university dedicated to the pursuit of knowledge in science, medicine, engineering, business, humanities and social science. As a young university – just stepping into its third decade – HKUST's achievements are remarkable. It has consistently gained top international rankings, a demonstration of the university's high academic quality and the global recognition it has achieved.

■ Map of session rooms

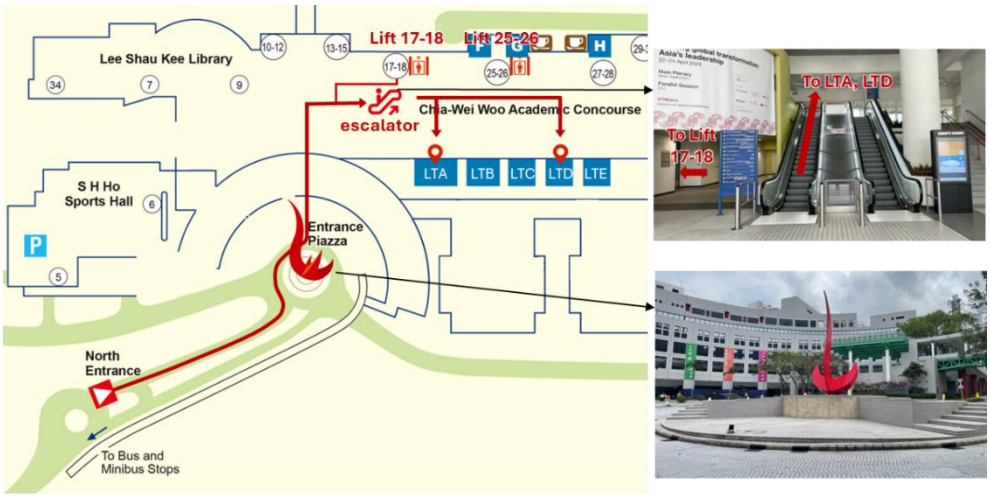


Fig. 1 From North Entrance to Chia-Wei Woo Academic Concourse and Lift 17-18

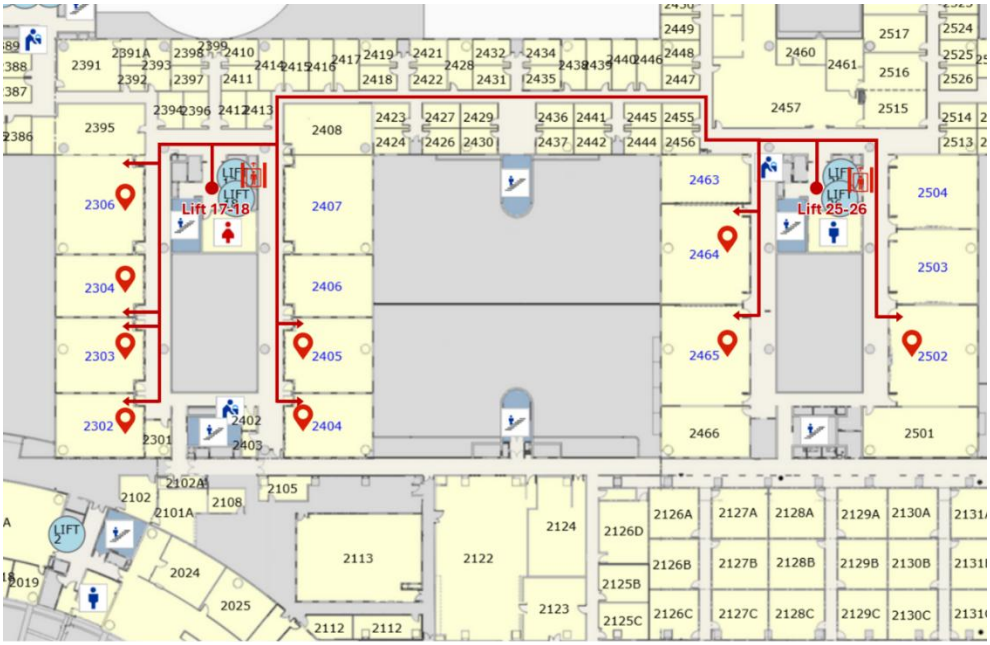


Fig. 2 From Lift 17-18 or Lift 25-26 to Room 2302, Room 2404, Room 2464, Room 2502 ect.

1. Starting from the **University North Entrance**, walk approximately 100 meters to reach the **Piazza**. Then enter the Academic Building, take the escalator to 1/F, and enter the Chia-Wei Woo Academic Concourse. Please see Fig.1 for details.
2. Enter the Academic Building, take the **Lift 17-18** to 2/F, and turn left to Room 2302, 2303, 2304, 2306, or turn right to Room 2404, 2405 and Room 2464, 2465, 2502. You can also take the Lift 25-26 to these rooms. Please see Fig.1 and Fig.2 for details.

■ Registration Fees (no budget)

	Students	Non-students
Early bird	1500 HKD	2000 HKD
Standard	2000 HKD	2500 HKD

The registration allows you to participate in public activities of BAS 2026, including plenary and parallel sessions, workshops and seminars.

■ Recommended Hotel

Dorsett Kai Tak:

Located in the vibrant Kai Tak Sports Park in Kowloon, Dorsett Kai Tak Hotel is an ideal choice for your stay in Hong Kong. Guests can enjoy stunning views of Victoria Harbour and easily access the new 50,000-seat Kai Tak Stadium and nearby shopping hotspots. The hotel features a rooftop bar and infinity pool, a spacious fitness center, and a luxurious banquet hall, allowing you to relax, stay healthy, or host unforgettable events.

Harbour Plaza 8 Degrees:

Harbour Plaza 8 Degrees is an award-winning, 4-star boutique hotel located in Kowloon, Hong Kong. Known for its distinctive leaning architectural design and cozy lobby, it features 704 modern rooms, a signature restaurant, an outdoor swimming pool, and convenient complimentary shuttle services to major hubs.

Hotel COZi · Harbour View:

Hotel COZi · Harbour View is a modern, 4-star hotel located in Kwun Tong, Kowloon East, Hong Kong. It features 598 spacious rooms—many with stunning views of Victoria Harbour and the Kai Tak Cruise Terminal—and sits just a 5-minute walk from the Ngau Tau Kok MTR station.

Local Transportation

The following information shows how to reach the conference venue from airports and railway stations. Taxi fares can usually be paid in cash (HKD), Alipay, WeChat Pay, and credit cards, depending on the taxi's payment facilities. For public transportation, MTR and buses generally support payment by Alipay. However, please note that minibuses usually accept only cash (HKD)or Octopus Card.

■ Hong Kong International Airport

Taxi: Hong Kong International Airport is a **45 minute** ride by taxi to the conference venue(HKUST) and the taxi fare is **about 360-380 HKD**. **No extra tip is required.** One should pay the taxi fare according to the fare meter reading. You can show the Direction Note as followed to your taxi driver for reaching the conference venue.

司機師傅，您好！
請車我去香港科技大學北門，按咪錶收費。
唔該晒！

Hello!
Please drop me (us) off at The Hong Kong University of Science and Technology, Clear Water Bay Campus, North Entrance.
Please charge according to the meter.
Thank you for your hard work!

Public transportation: You can take **Citybus A29** from Hong Kong International Airport to **Ngau Chi Wan BBI - Ngau Chi Wan Village**, then take **Bus 91M** to North Bus Station (HKUST).

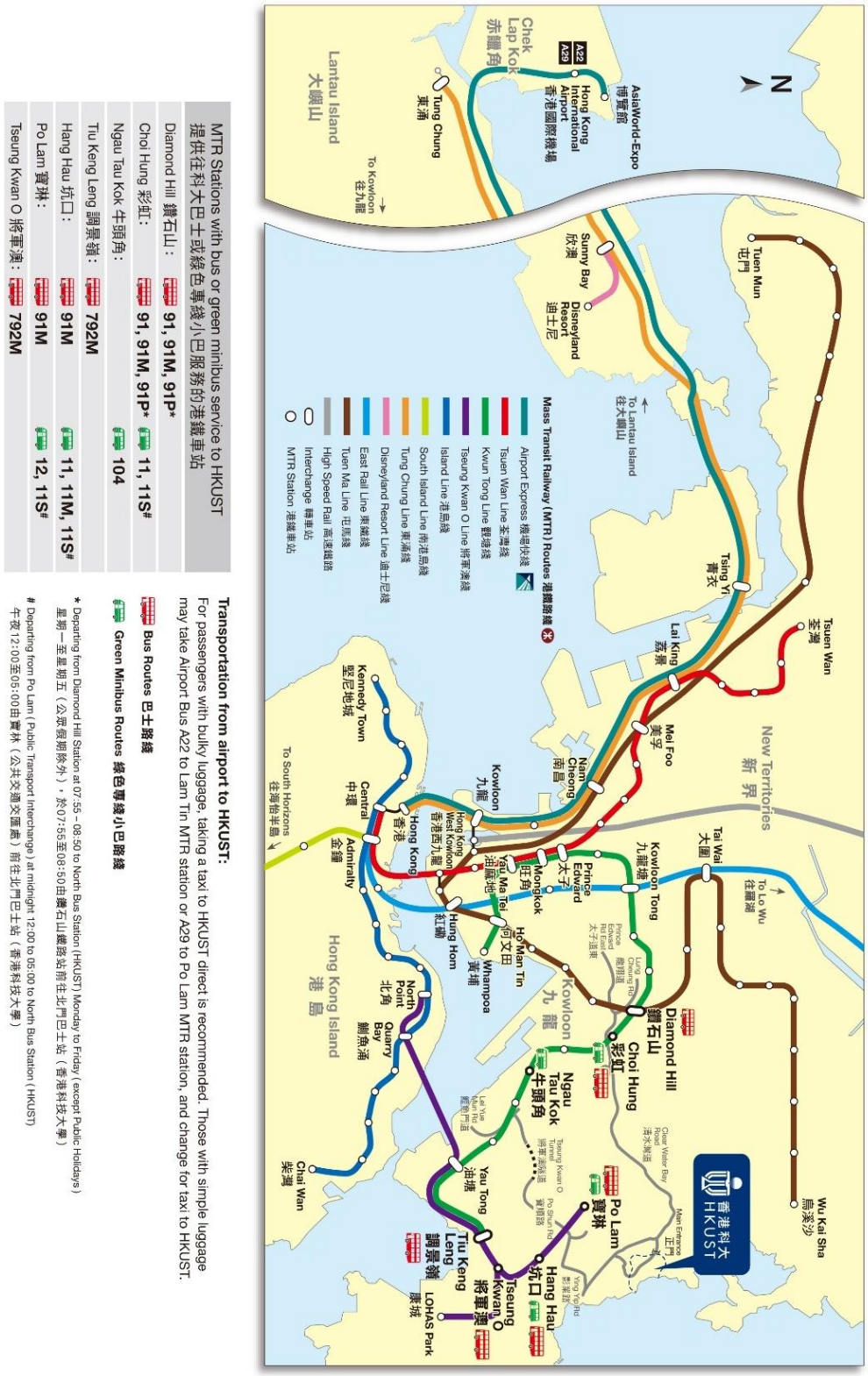
■ Hong Kong West Kowloon High Speed Rail Station

Taxi: Hong Kong West Kowloon High Speed Rail Stationis a **35 minute** ride by taxi to the conference venue(HKUST) and the taxi fare is **about 165 HKD**. **No extra tip is required.** One should pay the taxi fare according to the fare meter reading. You can show the Direction Note as followed to your taxi driver for reaching the conference venue.

司機師傅，您好！
請車我去香港科技大學北門，按咪錶收費。
唔該晒！

Hello!
Please drop me (us) off at The Hong Kong University of Science and Technology, Clear Water Bay Campus, North Entrance.
Please charge according to the meter.
Thank you for your hard work!

Public transportation: You can take **MTR Tuen Ma Line** from Hong Kong West Kowloon High Speed Rail Station to **Diamond Hill,** then walk around 5 minutes to **Diamond Hill Station Bus Terminus**. And after that, you can take **Bus 91 or Bus 91P** to North Bus Station (HKUST).



MTR Stations with bus or green minibus service to HKUST
提供往科大巴士或綠色專綫小巴服務的港鐵車站

Diamond Hill 鑽石山：	**91, 91M, 91P***
Choi Hung 彩虹：	**91, 91M, 91P*** **11, 11S#**
Ngau Tau Kok 牛頭角：	**104**
Tiu Keng Leng 調景嶺：	**792M**
Hang Hau 坑口：	**91M** **11, 11M, 11S#**
Po Lam 寶琳：	**91M** **12, 11S#**
Tseung Kwan O 將軍澳：	**792M**

Transportation from airport to HKUST:
For passengers with bulky luggage, taking a taxi to HKUST direct is recommended. Those with simple luggage may take Airport Bus A22 to Lam Tin MTR station or A29 to Po Lam MTR station, and change for taxi to HKUST.

Bus Routes 巴士路綫

Green Minibus Routes 綠色專綫小巴路綫

* Departing from Diamond Hill Station at 07:55 – 08:50 to North Bus Station (HKUST) Monday to Friday (except Public Holidays)
星期一至星期五（公眾假期除外），於07:55至08:50由鑽石山鐵路站前往北門巴士站（香港科技大學）

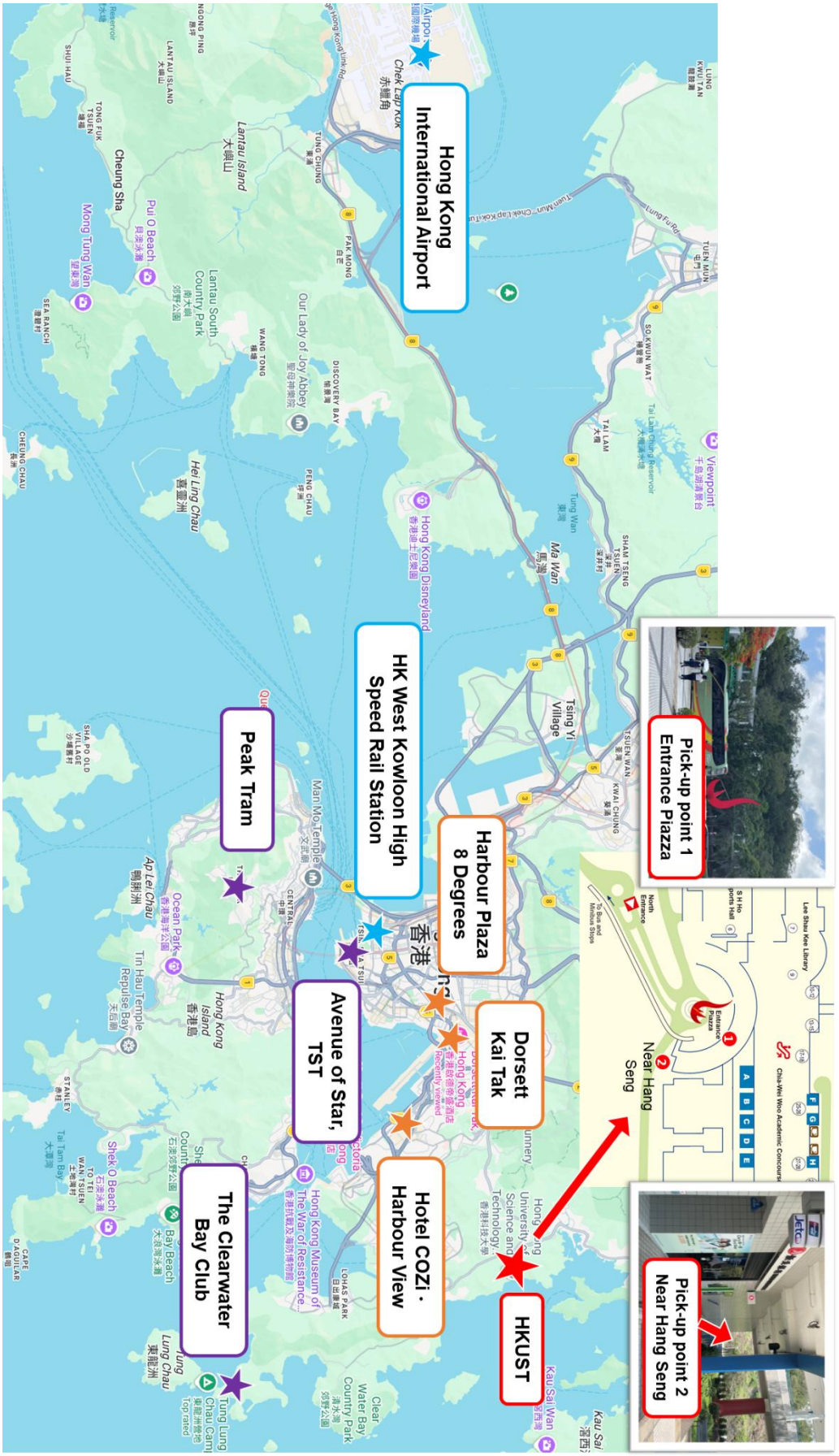
Departing from Po Lam (Public Transport Interchange) at midnight 12:00 to 05:00 to North Bus Station (HKUST)
午夜12:00至05:00由寶林（公共交通交匯處）前往北門巴士站（香港科技大學）

Shuttle Bus

During the conference, shuttle bus services will be provided for participants travelling between HKUST, designated hotels, famous landmarks and selected transportation points. Participants are kindly reminded to arrive at the pick-up point a few minutes before departure.

Date	Time	From	To
June 11	8:15 AM	Dorsett Kai Tak	HKUST Entrance Piazza
	8:15 AM	Harbour Plaza 8 Degrees	HKUST Entrance Piazza
	8:15 AM	Hotel COZi · Harbour View	HKUST Entrance Piazza
	18:30 PM	HKUST near Hang Seng	Dorsett Kai Tak
	18:30 PM	HKUST near Hang Seng	Harbour Plaza 8 Degrees
	18:30 PM	HKUST near Hang Seng	Hotel COZi · Harbour View
	18:30 PM	HKUST near Hang Seng	Tsim Sha Tsui Avenue of Stars
	18:30 PM	HKUST near Hang Seng	Central The Peak Tram
June 12	8:15 AM	Dorsett Kai Tak	HKUST Entrance Piazza
	8:15 AM	Harbour Plaza 8 Degrees	HKUST Entrance Piazza
	8:15 AM	Hotel COZi · Harbour View	HKUST Entrance Piazza
	16:30 PM	HKUST Entrance Piazza	Dorsett Kai Tak
	16:30 PM	HKUST Entrance Piazza	Harbour Plaza 8 Degrees
	16:30 PM	HKUST Entrance Piazza	Hotel COZi · Harbour View
	16:30 PM	HKUST Entrance Piazza	The Clearwater Bay Club
	21:00 PM	The Clearwater Bay Club	HKUST Entrance Piazza
	21:00 PM	The Clearwater Bay Club	Dorsett Kai Tak
	21:00 PM	The Clearwater Bay Club	Harbour Plaza 8 Degrees
	21:00 PM	The Clearwater Bay Club	Hotel COZi · Harbour View
June 13	8:15 AM	Dorsett Kai Tak	HKUST Entrance Piazza
	8:15 AM	Harbour Plaza 8 Degrees	HKUST Entrance Piazza
	8:15 AM	Hotel COZi · Harbour View	HKUST Entrance Piazza
	14:30 PM	HKUST Entrance Piazza	Hong Kong International Airport
	14:30 PM	HKUST Entrance Piazza	Hong Kong West Kowloon High Speed Rail Station

Note: The pick-up point for the HKUST is at the **Entrance Piazza or near Hang Seng** (as shown in the picture below). The pick-up point for hotels is at the hotel entrance. Please ask hotel staff for details.


Hong Kong International Airport
HK West Kowloon High Speed Rail Station
Peak Tram
Harbour Plaza 8 Degrees
Dorsett Kai Tak
Avenue of Star, TST
Hotel COZi · Harbour View
HKUST
The Clearwater Bay Club
Pick-up point 1 Entrance Piazza
Pick-up point 2 Near Hang Seng
Entrance Piazza
Near Hang Seng
North Entrance
Lee Shau Kee Library
Chek Lap Kok
Lantau Island
Cheung Sha
Pui O Beach
Mong Tung Wan
Lantau South Country Park
Our Lady of Joy Abbey
Hei Ling Chau
Hong Kong Disneyland
Tsing Yi
Ma Wan
Viewpoint
Tai Lam Chung Reservoir
Tsing Yi Village
Man Mo Temple
Ap Lei Chau
Ocean Park
Tin Hau Temple
Repulse Bay
Hong Kong Island
Hong Kong Museum of The War of Resistance
Shek O Beach
Big Wave Bay Beach
Tung Lung Chau
Clear Water Bay Country Park
Kau Sai Wan

Dining

Regular participants

For regular participants, lunch will be arranged at **UniBistro** from June 11th to June 13th. Participants may enter the dining venue with their conference badge.

Student participants

Student participants will receive electronic meal coupons, including three HKD 50 coupons and ten HKD 10 coupons, which can be used at selected dining halls and caterers on campus during the conference.

Available dining options include **American Diner, Can.teen II (LG1), Hungry Korean, McDonald's (LG5), Passione, Asia Pacific Caterine (LG7) and Gold Rice Bowl (LG7)**. Participants are advised to check the coupon instructions and available caterers before use. You can find locations via: https://cso.hkust.edu.hk/locations/restaurants.

Kindly Reminding

Weather

The weather in Hong Kong in June is generally hot and humid, with occasional showers or thunderstorms. Participants are advised to wear light and breathable clothing and bring an umbrella or raincoat. Indoor venues, hotels, shopping malls and public transport are usually air-conditioned, so a light jacket may also be useful. Please check the latest weather forecast before departure.

Payment

It is recommended to use cash, credit cards, Octopus Card, Alipay, WeChat Pay in Hong Kong. Please note that some small shops, local restaurants or markets may prefer cash or Octopus Card.

Currency Exchange

Currency exchange services are available at the airport, banks, and licensed money changers. ATMs are widely available in Hong Kong. Participants are advised to prepare some cash in HKD for transportation, small purchases and meals.

Electricity

The standard electrical voltage in Hong Kong is 220V and 50Hz. The power plugs commonly used are the British-style three-pin plugs. Participants from countries or regions using other plug types are advised to bring a suitable power adapter.

Insurance

The registration fee does not include insurance for the participants regarding accidents, sickness or loss of personal property. It is advisable that participants make their own arrangements with respect to health and travel insurance before leaving their countries.

Internet

Free Wi-Fi is generally available in hotels, conference venues, shopping malls, MTR stations and many public areas in Hong Kong. Participants may also consider purchasing a local SIM card or using international roaming services for mobile internet access.

Lost and Found

Any articles found should be taken to the Registration Desk. Lost properties can be claimed at the same place.

Medical Service

In case of illness or injury, please contact the conference volunteers or the Registration Desk for assistance. For emergencies in Hong Kong, please call 999 for police, fire or ambulance services.

Tax

There is no value-added tax or general sales tax in Hong Kong. Most prices listed in shops, restaurants and hotels are tax-inclusive unless otherwise stated. However, some hotels or restaurants may add a service charge, which will usually be indicated on the bill or menu.

Tipping

Tipping is not generally expected in Hong Kong for most services, such as taxis, restaurants and hotels. However, a small tip may be given to hotel porters, tour guides or service staff for exceptional service. Many hotels and restaurants add a 10% service charge, so additional tipping is optional unless the service charge is not included.

Programme Overview

<table>
<tr><th colspan="3">June 11th</th></tr>
<tr><td rowspan="3">9:00 - 9:20 am</td><td colspan="2">Opening Ceremony and Welcome Speech</td></tr>
<tr><td colspan="2">Chair: ZHU Yingxin</td></tr>
<tr><td colspan="2">Location: LT-A</td></tr>
<tr><td>9:20 - 9:30 am</td><td colspan="2">Group photo
Location: LT-A</td></tr>
<tr><td>9:30 - 9:55 am</td><td rowspan="3">Keynote Speech
Chair: ZHU Yingxin
Location: LT-A</td><td>Large-language-model (LLM) for Building Energy and Environment Design and Operations
Prof. CHEN Qingyan, The Hong Kong Polytechnic University</td></tr>
<tr><td>9:55 - 10:20 am</td><td>Systematic assessment of embodied carbon of buildings
Prof. PAN Wei, The University of Hong Kong</td></tr>
<tr><td>10:20 - 10:45 am</td><td>Dilution is more than ventilation: Why spaciousness and the full dilution cascade matter for infection control?
Prof. LI Yuguo, The University of Hong Kong</td></tr>
<tr><td>10:45 - 11:00 am</td><td colspan="2">Break
Location: LT-A</td></tr>
<tr><td>11:00 - 11:25 am</td><td rowspan="2">Keynote Speech
Chair: ZHU Yingxin
Location: LT-A</td><td>The Integrated City: Bridging the Gap Between Buildings, Mobility, and the Power Grid
Mr. Chun Yin MAK, Global Senior Vice President, Univers</td></tr>
<tr><td>11:25 - 11:50 am</td><td>Intelligent Computing in the Age of Artificial Intelligence
Prof. Pieter de WILDE, Lund University</td></tr>
</table>

11:50 - 12:15 pm				Integrating AI with Domain Knowledge for Building Energy Systems: Practices and Explorations **Prof. YAN Da**, *Tsinghua University*					
12:15 - 1:30 pm	**Lunch and Break** Location: HKUST Campus								
1:30 - 3:30 pm	**S01: Climate neutral building design and assessment, Building integrated renewable energy**	**S03: Passive and active design strategies, Generative design, data-driven modelling, and LLM**	**S05: Indoor air quality, thermal comfort, productivity and health**	**S07: Climate neutral building design and assessment, Building integrated renewable energy**	**S09: Indoor air quality, thermal comfort, productivity and health**	**S11: Urban micro-climate and heat island, Climate change mitigations and adaptations**	**S13: Urban scale building energy modelling; District cooling and heating**	**Workshop 1: Systematic reduction of lifecycle carbon emissions of the building stock of high-density cities**	**Workshop 3: Generative Agent-Driven Collaborative Architectural Design for Carbon-Neutral Future**
	Location: RM 2302	Location: RM 2303	Location: RM 2304	Location: RM 2306	Location: RM 2404	Location: RM 2465	Location: RM 2502	Location: RM 2464	Location: RM 2405
	Chair: TAN Gang	Chair: LIN Guanjing	Chair: ZHANG Tengfei	Chair: ZHENG Xing	Chair: LIU Wei	Chair: LIU Jianlin	Chair: Adrian CHONG	Chair: YU Cong	Chair: HAN Yunsong
	Chair: DENG Jiaojiao	Chair: CHEN Jianli	Chair: SHI Shanshan	Chair: LUO Zhaoyang	Chair: LIU Xue	Chair: HAN Mengtao	Chair: ZHAN Sicheng	Chair: YANG Jingjing	Chair: ZHUANG Dian
	Secretary: LIU Jiatao	Secretary: JIN Zhineng	Secretary: LI Yanjie	Secretary: LIU Yunqin	Secretary: NI Shuangshuang	Secretary: HUANG Qiqi	Secretary: LU Qinhui	Secretary: JIANG Mengqi	Secretary: CHENG Ip

3:30 - 4:00 pm	Poster								
	Location: Poster								
4:00 - 6:00 pm	**S02: Climate neutral building design and assessment, Building integrated renewable energy**	**S04: Passive and active design strategies, Generative design, data-driven modelling, and LLM**	**S06: Indoor air quality, thermal comfort, productivity and health**	**S08: Climate neutral building design and assessment; Building-grid interaction**	**S10: Urban micro-climate and heat island, Climate change mitigations and adaptations**	**S12: Urban micro-climate and heat island, Climate change mitigations and adaptations**	**S14: Climate neutral building design and assessment; Building-grid interaction**	**Workshop 2: AI-Driven Urban Wind and Microclimate Simulations for Sustainable City Development**	**Workshop 6: Towards climate-resilient futures: Thermal environments and human adaptation in a warming world**
	Location: RM 2302	Location: RM 2303	Location: RM 2304	Location: RM 2404	Location: RM 2405	Location: RM 2465	Location: RM 2502	Location: RM 2464	Location: RM 2306
	Chair: ZHANG Xingxing	Chair: ZHANG Fan	Chair: ZHANG Nan	Chair: GANG Wenjie	Chair: WANG Wei	Chair: ZHOU Jin	Chair: HU Maomao	Chair: WANG Liangzhu	Chair: SHEN Pengyuan
	Chair: ZHOU Xin	Chair: SHI Feng	Chair: YANG Xiaochen	Chair: WU Zhibin	Chair: ZENG Zhaoyun	Chair: CHEN Yongbao	Chair: GENG Yang	Chair: TIAN Geng	Chair: LIU Xue
	Secretary: CHENG Ip	Secretary: HU Yike	Secretary: JIANG Mengqi	Secretary: JIANG Huayu	Secretary: HUANG Qiqi	Secretary: WANG Xinyu	Secretary: LU Kunhan	Secretary: LU Qinhui	Secretary: LIN Jinxi

June 12th		
9:00 - 9:25 am	**Keynote Speech Chair: ZHENG Siqi Location: LT-D**	The Optimal Pathway of Building Decarbonization and Investment Decision-Making Under Uncertainties: From Building Level to Portfolio Level **Prof. ZHENG Siqi**, *Massachusetts Institute of Technology*
9:25 - 9:50 am		Societal Challenges of the Anthropocene – An Evolutionary, System-of-Systems, Convergence Paradigm **Prof. John LITTLE,** *Virginia Tech*
9:50 - 10:15 am		A Life Cycle Assessment Framework for Carbon Emissions and Mitigation Potential of Urban Rail Transit **Prof. LI Xiaofeng,** *Tsinghua University*
10:15 - 10:30 am	Break Location: LT-D	
10:30 - 10:55 am	**Keynote Speech Chair: ZHENG Siqi Location: LT-D**	A Paradigm Shift in Evidence Based Policy Making: Building Performance Simulation in the Context of Energy-Health-Climate Nexus **Prof. Dejan MUMOVIC**, *University College London*
10:55 - 11:20 am		The Important Role and Application Modes of Thermal Energy Storage Technology in the Era of New Energy **Prof. NIU Jianlei,** *The Hong Kong Polytechnic University*
11:20 - 11:45 am		TBD **Prof. YAN Jinyue,** *The Hong Kong Polytechnic University*
11:45 - 1:30 pm	Lunch and Break Location: HKUST Campus	

1:30 - 3:30 pm	**S15: Climate neutral building design and assessment, Building integrated renewable energy**	**S16: Passive and active design strategies, Generative design, data-driven modelling, and LLM**	**S17: Indoor air quality, thermal comfort, productivity and health**	**S18: Climate neutral building design and assessment; Building-grid interaction**	**S19: Passive and active design strategies, Generative design, data-driven modelling, and LLM**	**S20: Urban micro-climate and heat island, Climate change mitigations and adaptations**	**S21: Smart grid, microgrid, and optimization of energy networks; Building-grid interaction**	**Workshop 4: Energy interaction between buildings and electric vehicles towards grid decarbonization**	**Workshop 5: Multi-dimensional modelling, flexibility and decision support for climate-neutral districts.**
	Location: RM 2302	Location: RM 2303	Location: RM 2304	Location: RM 2404	Location: RM 2464	Location: RM 2465	Location: RM 2502	Location: RM 2405	Location: RM 2306
	Chair: ZHAO Dongliang	Chair: SUN Yongjun	Chair: LI Yanxue	Chair: Floriberta BINARTI	Chair: WU Yan	Chair: SUN Xiaoqin	Chair: HUANG Gongsheng	Chair: WANG Zhe	Chair: Rosaria VOLPE
	Chair: ZHANG Xiang	Chair: XIE Yongxin	Chair: CAO Xiaodong	Chair: TANG Hao	Chair: QIAN Mingyang	Chair: AN Jingjing	Chair: LI Guannan	Chair: LIU Xiaochen	Chair: ZHANG Xingxing
	Secretary: LIN Jinxi	Secretary: LI Yanjie	Secretary: NI Shuangshuang	Secretary: HU Yike	Secretary: JIANG Huayu	Secretary: ZHANG Shihong	Secretary: HU Ziqi	Secretary: ZHAO Lige	Secretary: LIU Jiatao
3:30 - 4:10 pm	**Poster voting** Location: Poster								
4:30 - 5:30 pm	**From HKUST campus to Clear Water Bay Country & Golf Club** Location: HKUST Campus (Departure time-4:30 pm)								
5:30 - 9:00 pm	**Banquet** Location: **The Clearwater Bay Golf & Country Club** Happy Hour, Banquet, and Best Paper Awarding Ceremony.								

June 13th		
9:00 - 9:25 am	**Keynote Speech Chair: LIN Borong Location: LT-A**	Potentials and Technologies for Harnessing Energy Flexibility in Buildings and Data Centers toward Carbon-Neutral Power Grids **Prof. WANG Shengwei,** *The Hong Kong Polytechnic University*
9:25 - 9:50 am		Digital Twins and AI-Driven Energy Management for Next-Generation Grid-Interactive Buildings **Prof. Alfonso CAPOZZOLI,** *Politecnico di Torino*
9:50 - 10:15 am		Beyond the Roof: The Evolution of the Solar Building Skin - Design and Optimization **Prof. ZHAI Zhiqiang,** *University of Colorado at Boulder*
10:15 - 10:30 am	Break Location: LT-A	
10:30 - 10:55 am	**Keynote Speech Chair: LIN Borong Location: LT-A**	Adaptive Thermal Comfort in HVAC Buildings: Managing the Comfort vs Energy Nexus **Prof. Richard de DEAR,** *The University of Sydney*
10:55 - 11:20 am		Understanding the grade of sensible and latent load for energy-efficient built environment **Prof. LI Xianting,** *Tsinghua University*
11:20 - 11:50 am	**Awarding ceremony and closure** Location: **LT-A**	
	Awarding ceremony: 11:20 am -11:35 am	
	Closure 11:35 am -11:50 am	
11:50 - 2:00 pm	**Lunch and Free Social** Location: **HKUST Campus**	

Keynote Speaker **(In order of time)**

Title: Large-language-model (LLM) for Building Energy and Environment Design and Operations

Jun. 11, 9:30 am – 9:55 am
Location: LT-A

Prof. CHEN Qingyan
The Hong Kong Polytechnic University

Title: Systematic assessment of embodied carbon of buildings

Jun. 11, 9:55 am - 10:20 am
Location: LT-A

Prof. PAN Wei
The University of Hong Kong

Title: Dilution is more than ventilation: Why spaciousness and the full dilution cascade matter for infection control?

Jun. 11, 10:20 am - 10:45 am
Location: LT-A

Prof. LI Yuguo
The University of Hong Kong

Title: The Integrated City: Bridging the Gap Between Buildings, Mobility, and the Power Grid

Jun. 11, 11:00 am - 11:25 am

Location: LT-A

Mr. Chun Yin MAK
Global Senior Vice President, Univers

Title: Intelligent Computing in the Age of Artificial Intelligence

Jun. 11, 11:25 am - 11:50 am

Location: LT-A

Prof. Pieter de WILDE
Lund University

Title: Integrating AI with Domain Knowledge for Building Energy Systems: Practices and Explorations

Jun. 11, 11:50 am - 12:15 pm

Location: LT-A

Prof. YAN Da
Tsinghua University

Title: The Optimal Pathway of Building Decarbonization and Investment Decision-Making Under Uncertainties: From Building Level to Portfolio Level

Jun. 12, 9:00 am - 9:25 am

Location: LT-D

Prof. ZHENG Siqi

Massachusetts Institute of Technology

Title: Societal Challenges of the Anthropocene – An Evolutionary, System-of-Systems, Convergence Paradigm

Jun. 12, 9:25 am - 9:50 am

Location: LT-D

Prof. John LITTLE

Virginia Tech

Title: A Life Cycle Assessment Framework for Carbon Emissions and Mitigation Potential of Urban Rail Transit

Jun. 12, 9:50 am - 10:15 am

Location: LT-D

Prof. LI Xiaofeng

Tsinghua University

Title: A Paradigm Shift in Evidence Based Policy Making: Building Performance Simulation in the Context of Energy-Health-Climate Nexus

Jun. 12, 10:30 am - 10:55 am

Location: LT-D

Prof. Dejan MUMOVIC

University College London

Title: The Important Role and Application Modes of Thermal Energy Storage Technology in the Era of New Energy

Jun. 12, 10:55 am - 11:20 am

Location: LT-D

Prof. NIU Jianlei

The Hong Kong Polytechnic University

Title: TBD

Jun. 12, 11:20 am - 11:45 am

Location: LT-D

Prof. YAN Jinyue

The Hong Kong Polytechnic University

Title: Potentials and Technologies for Harnessing Energy Flexibility in Buildings and Data Centers toward Carbon-Neutral Power Grids

Jun. 13, 9:00 am - 9:25 am

Location: LT-A

Prof. WANG Shengwei
The Hong Kong Polytechnic University

Title: Digital Twins and AI-Driven Energy Management for Next-Generation Grid-Interactive Buildings

Jun. 13, 9:25 am - 9:50 am

Location: LT-A

Prof. Alfonso CAPOZZOLI
Politecnico di Torino

Title: Beyond the Roof: The Evolution of the Solar Building Skin - Design and Optimization

Jun. 13, 9:50 am - 10:15 am

Location: LT-A

Prof. ZHAI Zhiqiang
University of Colorado at Boulder

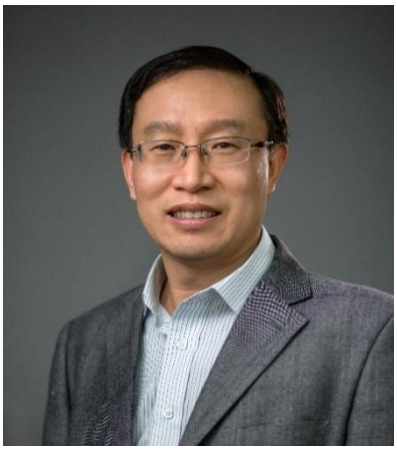
Title: Adaptive Thermal Comfort in HVAC Buildings: Managing the Comfort vs Energy Nexus

Jun. 13, 10:30 am - 10:55 am

Location: LT-A

Prof. Richard de DEAR

The University of Sydney



Title: Understanding the grade of sensible and latent load for energy-efficient built environment

Jun. 13, 10:55 am - 11:20 am

Location: LT-A

Prof. LI Xianting

Tsinghua University

Session Codes

Session	Theme	Room
	June 11th Thursday 1:30 pm - 3:30 pm	
S01	Climate neutral building design and assessment, Building integrated renewable energy	Room 2302
S03	Passive and active design strategies, Generative design, data-driven modelling, and LLM	Room 2303
S05	Indoor air quality, thermal comfort, productivity and health	Room 2304
S07	Climate neutral building design and assessment, Building integrated renewable energy	Room 2306
S09	Indoor air quality, thermal comfort, productivity and health	Room 2404
S11	Urban micro-climate and heat island, Climate change mitigations and adaptations	Room 2465
S13	Urban scale building energy modelling; District cooling and heating	Room 2502
WS1	Systematic reduction of lifecycle carbon emissions of the building stock of high-density cities	Room 2464
WS3	Generative Agent-Driven Collaborative Architectural Design for Carbon-Neutral Future	Room 2405
	June 11th Thursday 3:30 pm - 4:00 pm	
P1		Poster
	June 11th Thursday 4:00 pm - 6:00 pm	
S02	Climate neutral building design and assessment, Building integrated renewable energy	Room 2302
S04	Passive and active design strategies, Generative design, data-driven modelling, and LLM	Room 2303
S06	Indoor air quality, thermal comfort, productivity and health	Room 2304

S08	Climate neutral building design and assessment; Building-grid interaction	Room 2404
S10	Urban micro-climate and heat island, Climate change mitigations and adaptations	Room 2405
S12	Urban micro-climate and heat island, Climate change mitigations and adaptations	Room 2465
S14	Climate neutral building design and assessment; Building-grid interaction	Room 2502
WS2	AI-Driven Urban Wind and Microclimate Simulations for Sustainable City Development	Room 2464
WS6	Towards climate-resilient futures: Thermal environments and human adaptation in a warming world	Room 2306
	June 12th Friday 1:30 pm - 3:30 pm	
S15	Climate neutral building design and assessment, Building integrated renewable energy	Room 2302
S16	Passive and active design strategies, Generative design, data-driven modelling, and LLM	Room 2303
S17	Indoor air quality, thermal comfort, productivity and health	Room 2304
S18	Climate neutral building design and assessment; Building-grid interaction	Room 2404
S19	Passive and active design strategies, Generative design, data-driven modelling, and LLM	Room 2464
S20	Urban micro-climate and heat island, Climate change mitigations and adaptations	Room 2465
S21	Smart grid, microgrid, and optimization of energy networks; Building-grid interaction	Room 2502
WS4	Energy interaction between buildings and electric vehicles towards grid decarbonization	Room 2405
WS5	Multi-dimensional modelling, flexibility and decision support for climate-neutral districts	Room 2306

Detailed Parallel Session

June 11th

- S01

Jun 11th
1:30pm - 3:30pm

S01: Climate neutral building design and assessment, Building integrated renewable energy
Location: RM2302
Chair: TAN Gang, DENG Jiaojiao
Secretary: LIU Jiatao

From Static Compliance to Dynamic Decision-Making: An Interactive Multi-Agent System for Early-Stage Sustainable Building Design
Yuxuan Li, Xiaoyue Yan, Yihui Li, Borong Lin, Weimin Zhuang

Traditional bioclimatic architecture combined with contemporary passive strategies to enhance sustainability of abandoned rural houses in Vojvodina
Jovana Stanisic

Unveiling Urban and Architectural drivers of BIPV Potential for Early-Stage Design in High-Density Cities
Zeming ZHAO, Hangxin LI, Shengwei WANG

A simplified heat transfer performance calculation method for double-layer in series pipe-embedded wall
Chongchong Hou, Xianting Li

Thermal resistance-capacitance (RC) network modeling and operation optimization for integrated photovoltaic-photothermal-energy storage walls in summer
Ziqi Zhao, Zhengxia Zhao, Man Fan, Xiangfei Kong, Tailu Li, Han Li

Evaluation of Photovoltaic Potential in University Campus Building Complexes Based on Airborne LiDAR Data
Liqin Zheng, Cheng Fan

Can semi-transparent photovoltaic (STPV) windows be used in Chinese office building?
Shuo Zhang, Feng Wang, Tengfei ZHANG

Optimized Design Method for Building-Integrated Photovoltaics in Office Blocks Adapted to Future Climate Change_ A Case Study of Wuhan City
Gaomei Li, Hongxin Guo, Hao Zhou, Hua Zhong, Borong Lin

Comparison of energy flows via photovoltaic façades and regular façades
Kailong Pang, Feng Wang, Guanqiong Wei, Tengfei ZHANG

Archetype-Based Calibration for Urban-Scale Building Energy Modeling: A Case Study of Nanjing
Linxi Luo, Yongjun Sun, Shengxin Ma

- S03

Jun. 11th 1:30pm - 3:30pm	**S03: Passive and active design strategies, Generative design, data-driven modelling, and LLM** **Location: RM2302** **Chair:** **LIN Guanjing** **CHEN Jianli** **Secretary:** **JIN Zhineng**
	A Multi-Agent LLM Framework for Closed-Loop Automatic Optimization of Building Energy Models via EnergyPlus Zhexuan Yu, Yihui Li, Xiaoyue Yan, Jun Xiao, Hao Zhou, Borong Lin
	Comparative experimental study on building energy, thermal and daylighting performance of thermotropic glass and horizontal overhang in subtropical climate Xuan Yang, Yilin You, Hanzhen Dai, Shaosen Wang, Feng Shi, Yixin Zhang, Sha Chen, Xiaoqiang Hong
	Synergistic optimization of the spectral properties of greenhouse cover film and indoor thermal environment: A case study in Chongqing, China Yue He, Xiaomeng Chen, Chi Feng
	Climate Adaptability of Phase Change Material-Enhanced Radiative Cooling Roofs through Coupled Thermal-Dew Modelling Ziao Zheng, Teng Xiong, Xiaoqiang Zhai, Mattheos Santamouris, Riccardo Paolini
	Photothermal Performance Assessment and Optimization of Thermochromic Windows for Low-Carbon Buildings Yutong Tan, Rongpeng Zhang, Jinqing Peng
	LLM-Based HVAC Anomaly Detection via Domain Knowledge Integration Zeyu Zheng, Bingyi Wang, Jian Zhang, Yang Zhao
	A large language model-assisted optimization model automatic generation method for buildings demandresponse control Jiayu Xu, Chenxin Feng, Jie Lu, Yang Zhao
	A Transformer-Based Physically Consistent Neural Network for Indoor Temperature Forecasting in Office Buildings Jiequn Lu, Wangtu Xu, XiaoQiang Hong
	Memory-Augmented LLM Agents for Adaptive HVAC Control in Building Energy Management Weilin Xin, Wei Liang, Ruiying Jin, Adrian Chong
	Machine Learning–Based Modeling and Dynamic Analysis of End-Use Energy Consumption in Data-Constrained Airport Terminal Buildings Junlang Zhu, Yang Geng, Hao Tang, Borong Lin

- S05

Jun. 11th 1:30pm - 3:30pm	**S05: Indoor air quality, thermal comfort, productivity and health** **Location: Room 2304** **Chair:** **ZHANG Tengfei**

	SHI Shanshan **Secretary:** **LI Yanjie**
	Upper temperature limits in subtropical offices with elevated air speed: Integrated insights from thermal comfort, physiology, and cognitive performance Zhibin WU
	Performance Investigation of a Multi-Stage Vacuum Membrane Dehumidification System for Precision Microclimate Control of Cultural Relics Ruiting Wu, Yilin Liu, Ziyao Li, Liwen Jin
	Respiratory droplet exposure during close contact in pediatric wards Xian Lin, Han Yu, Fangli Zhao, Shenglan Xiao
	Effects of clothing radiative properties on human thermal comfort in outdoor high-temperature environment Shengnan Ouyang, Shan Gao, Chi Feng
	Effects of restorative interventions in confined environment on stress, physiological and cognitive performance Jingying Dong, Zhibin Wu
	Calibration of the Sweating Function in Thermoregulation Model Based on Chamber Experiment Xianzhun ZHONG, Yongxin Xie, Han Liu, Peiyang Du, Jianlei Niu
	Thermal comfort differences among patients with different orthopedic diseases Meng Zhen, Jingjing Liu
	A Transfer-Learning Framework for Thermal Comfort Prediction with Limited Local Data for Future Climate Conditions Haitao Yu, Kailun Feng, Weizhuo Lu
	From Analogue Codes to Generative Forms: A Scripted Design-to-Code Workflow for Densely Built Environments Gautam Adhikary
	A data-driven approach to healthcare hygiene: dual-view mmWave radar sensing for privacy-preserving handwashing recognition Nan Zhang, Jianchao Zhang, Fangyu Li

- **S07**

Jun. 11th **1:30pm - 3:30pm**	**S07: Climate neutral building design and assessment, Building integrated renewable energy** **Location: Room 2306** **Chair:** **ZHENG Xing** **LUO Zhaoyang** **Secretary:** **LIU Yunqin**
	From Static to Smart: Unlocking Building Performance with Dynamic Electrochromic Window Control

	Shuangdui Wu, Yucan Peng, Borong Lin
	Towards Occupant-Centric Non-Contact Thermal Comfort Assessment: Based on Embodied Sensing and Multimodal Fusion Yuren Yang, Mufeng Yuan, Yang Geng, Borong Lin
	Risk-Governed Surrogate Modeling for Early-Stage School Design Tian Xia, Azlan Shah Ali, Norhayati Mahyuddin, XiaoFei Han
	Development and validation of a data quality assessment framework for machine learning modelling in building energy systems Yongbao Chen, Fu Xiao, Zhe Chen
	A prototype-based LLM-assisted framework for residential building life-cycle carbon assessment Shuxin Jiang, Yuhao Qiao, Sujie Shen, Liu Yang
	Inverse Design of Indoor thermal Environment using A New Deep Learning Method Xingwang Zhao, Jianpeng Li
	An LLM-Orchestrated Automated Design Method for Rainwater Harvesting Systems of Non-linear Building Curtain Walls Xiangyi He, Yi Su, Huibin Wu, Yu Zhao, Yinan Zhang, Wenjie Peng, Quan Jing
	Conditional Diffusion-Driven Interval Prediction and Uncertainty Quantification for Building Energy Load Jinghan Lai, Cheng Fan
	From Passive Container to Responsive Organism: Human-Centric Adaptive Building Optimization Environment-Agent-AI Framework Yonghong Xu, Shi Yin, Adnan Ibrahim, Yiqiang Xiao, Xinyi Zou, Yanchu Liang
	Multi-Objective Optimization of Ventilated Photovoltaic Vacuum Glazing for Office Buildings in Shanghai Using XGBoost and NSGA-II Qianru Bi, Qian Jin

- S09

Jun. 11th **1:30pm - 3:30pm**	**S09: Indoor air quality, thermal comfort, productivity and health** **Location: Room 2404** **Chair:** **LIU Wei** **LIU Xue** **Secretary:** **NI Shuangshuang**
	Impacts of heavy-tailed contact heterogeneity on fomite transmission dynamics in indoor surface touch networks Jinhua Zhou, Zihan Hao, Nan Zhang, Shenglan Xiao
	Health Risks of Indoor VOCs in Chinese Museums: Exposure Assessment, Prioritization, and Carcinogenic Mechanisms Yi Fan, Shaodan Huang
	A BRIGHT Framework for Bacterial Health-Risk Assessment and Control in Building Environments Huan Liu, Qisheng Li, Chi Feng, Meng Liu

	Contact Network Based Dynamic Control of Airborne Microbial Contamination and Energy Efficiency in High-Traffic Hospital Areas Qi Zhen, Anxiao Zhang, Yiming Du, Ling Zhu
	Configuration-as-Fields Representation for Generalizable Indoor Airflow Surrogates Yiting Zhang, Wei Liang, Yue Lei, Fangyu Liu, Roman Buckle, Kianwee Chen, Ippei Izuhara, Eikichi Ono, Shohei Miyata, Adrian Chong
	Enhancing Real-Time Indoor Air Quality Prediction Using GA-Optimized Markov Transition Matrices Yifan An, Yonggang Lei, Wuxuan Pan
	Simulation of Misclassifications in Traditional Air Pollution Exposure Assessment: Insights from a High-Temporal Resolution Framework Shuwen Ding, Shanshan Shi
	Coupled Solar Chimney-Room Ventilation: A CFD Parametric Study on Vent Geometry Jun Gong, Lup Wai Chew, Poh Seng Lee
	Automated Identification of Building Envelope Thermal Defects Using Multimodal Imaging and Deep Learning Linghan Yao, Wei Wang
	Impact of air-conditioning heat on urban microclimate and pollutant dispersion in typical urban street blocks in Hong Kong under various background wind speeds: an LES study Guangda Li, Weiheng Liang, Xing Zheng

- **S11**

Jun. 11th **1:30pm - 3:30pm**	**S11: Urban micro-climate and heat island, Climate change mitigations and adaptations** **Location: Room 2465** **Chair:** **LIU Jianlin** **HAN Mengtao** **Secretary:** **HUANG Qiqi**
	Sensitivity of Residential Retrofit Measures to Urban Microclimate in UK Social Housing Neighbourhoods Xiaoxiong Xie, Zhiwen Luo
	Resolving the Density Paradox: How Compact Morphologies Simultaneously Reduce Carbon Emissions and Alleviate Heat Island Effects in Industrial Dormitories danya Feng
	Modeling Thermal Stress for Tropical Beaches: Integrating Physiological Warning and Luminous Environmental Factors Jiahao Yang, Jun Lu, Zhaosong Fang
	Climate-Responsive Transit-Oriented Development: A Typology-Based Parametric Analysis of Microclimatic Performance Yuhong Qian

	Study on Pollutant Dispersion Around an Isolated Building Based on a Wind-Pollutant Coupled LBM-LES Yifan Hu, Mengtao Han
	Rooftop Mitigation Strategies on Urban Thermal Environment: A Study in Singapore with WRF Local Climate Zones Puyang Liu, Rui Xin, Xian-xiang Li, Lup Wai Chew
	Spatial Inequality of Urban Heat Island Growth during Urbanization: Evidence from Nanjing (2000-2020) Yifan Guo, Wei Wang
	Machine Learning-Based Analysis of Urban Heat Island and Solar Irradiance: A Multiscale Study in Amsterdam Guang Hu, Tingting Zhu, Dragan Milosevic
	Urban–rural differences in residential climate adaptation: Evidence from a Chinese megacity Tianyi Li, Jingjing An, Shan Hu
	Revealing Coupled Mechanisms between Urban Trees and Building Daylighting with Façade Radiation Performance Lirui Deng

- **S13**

Jun. 11th **1:30pm - 3:30pm**	**S13: Urban scale building energy modelling; District cooling and heating** **Location: Room 2502** **Chair:** **Adrian CHONG** **ZHAN Sicheng** **Secretary:** **LU Qinhui**
	A Quantitative Framework for Evaluating Building Energy Resilience during Power Outages Qinhui Lu, Shihong Zhang, Qiqi Huang, Xinyu Wang, Zhe Wang
	High-Resolution Urban Building Energy Modelling for Australian Cities: A Bottom-Up Framework and Application to Melbourne Ziying Sun, Ruijie Liu, Ben Liu, Zijun Ye, Victor Chang, Jenny ZHOU
	A Schema-Driven Approach for Automated and Scalable Urban Building Energy Modeling Xinyu WANG, Shihong ZHANG, Qiqi HUANG, Qinhui LU, Zhe WANG
	Performance evaluation of an indirect evaporative absorption thermal energy storage for space cooling Yuxin Ma, Mengying Li, Shauhrat S. Chopra, Wei Wu
	A systematic review of urban building energy modeling for quantifying energy flexibility at scale Zhang Deng
	Buildings.city 2.0: A Scalable, Web-Based Framework for Urban Building Energy Modeling Pengdi LYu, Yu Qian Ang
	From Sensors to Spatial Models: The Environmental Latent Space for Urban to Building Performance Simulations

Yu Qian Ang, Xueyu Chen, Ruohan Xu

Thermal Efficiency Evaluation of a Regional Heating System Coupled with Deep Borehole Heat Exchanger and Heat Pump in Southern Region
Anni Xu, Yixing Chen

From Behavioral Profiles to Urban Energy Demand: A Socio-Demographic Mapping Framework for Residential UBEM in Xiamen
Lin Yang, Yilin You, Xiang Liu, Manli You, Meng Wang, Rui Jing, Feng Shi

Quantification and correction of additional heat loss from buried pipe in permafrost based on a thermo-hydraulic coupled model
Baichao Wang, Yanfeng Liu, Cong Song, Dengjia Wang, Weijie Tian

- S02

Jun. 11th 4:00pm - 6:00pm	**S02: Climate neutral building design and assessment, Building integrated renewable energy** **Location: Room 2302** **Chair:** **ZHANG Xingxing** **ZHOU Xin** **Secretary:** **CHENG Ip**
	Review of Emission Characteristics and Strengths from Human and Printer-Generated Particles Weihui Liang, Lulu Ren
	A Novel Estimation Procedure for Photovoltaic Power Generation Ip Cheng, Zhe Wang
	BIM-Based Life-Cycle Carbon Assessment Framework for Climate-Neutral Prefabricated Building at the Construction and Operation Stages Wai Phyo Aung, Michael Anharlintama Tjiongnotoputera, Zhang Hong
	Overheating Risk in Cold-Region Residential Buildings under Evolving Building Regulations: Evidence from Field Measurements, Experiments and Simulation Jiahui Yu, Bolun Zhao, Yitong Xu, Yuhan Zhao, Haibo Guo
	Optimizing Tilt and Azimuth Angles of Residential PV Systems for Enhanced Generation-Load Matching Across China Lan Wang
	Experimental and numerical study of optimizing heat dissipation and efficiency of FIPV through a three-dimensional ventilation gap Zexin Chen, Wei Wang
	Isolated Sensitivity Analysis of Ground-Coupled Heat Transfer in an Underground Building Sanjaya Sena, Rahul Goyal, S. K. Tyagi
	Fault Detection and Diagnostics in Net Zero and Positive Energy Buildings for Energy Security Fault Howard Cheung
	A Study on Low-Carbon Retrofit Strategies for Existing Buildings Based on Dynamic Carbon Emission Factors Jiachi Yan, Yongcong Guo, Guanjing Lin
	Investigation and Analysis of Photovoltaic Power self-Consumption in a Net Zero Energy Building District Jianlin Liu, Kai Du, Yang He, Rui LI, Mingyang Qian

- **S04**

Jun. 11th 4:00pm - 6:00pm	**S04: Passive and active design strategies, Generative design, data-driven modelling, and LLM** **Location: Room 2303** **Chair:** **ZHANG Fan** **SHI Feng** **Secretary:** **HU Yike**
	Data-Driven Multi-Objective Optimization of Asymmetric Thermal Insulation Design for Residential Building Envelopes on the Loess Plateau Jiale Zhu, Jiale Zhou, Wenlong Li, Xiaojun Zhou
	Computer vision-driven parametric analysis of passive cooling in Turpan underground dwellings in arid hot-arid climate Mengyao Li, Liu Yang, Yan Liu, Qimeng Cao
	Evaluating Micro-climatic Characteristics and Adaptive Strategies for the Sustainable Preservation of Traditional Timber Heritage: The Case of Foguang Temple's East Hall Yichen Wang, Xin Zhou
	A Retrieval-Augmented Large Language Model Framework for Privacy Risk Assessment in the Operational Stage of BIM Ziqing Lin, RAMACHANDRAN JAYALAKSHMY, KahMun Au, ABDALLA ABAKR Yousif, Nabil Elioini
	Autonomous multi-agent orchestration for neighborhood-scale urban building energy modeling via OpenClaw Ye Xia, Yu Qian Ang
	An A2A Multi-Agent Framework for Building Simulation: A Case Study on Openstudio Hanlong Wan, Fujian Jiang, Yanping Yuan
	Generative Design Methods for Facades to Support Regional Contextual Continuity: A Case Study of the Kisakasaka Government Building, Zanzibar, Tanzania Yunsong Han, Xiran Cui, Ziming Chen, Runsen Song, Yiran Zhou, Biaoqing Tao, Jingrong Ma
	From Plan Typology to Climate Performance: Deriving a 'Space–Energy' Schema for Vernacular Dwellings in Northwest Yunnan Kundi Shu, Shanchao Xin, Xinmei Deng, Yuhang Kong, Linxi Peng
	Appropriate Summer Outdoor Calculation Parameters for Passive Radiative Cooling Envelopes Guoqiang Peng, Shuoyan Wang, Liping Yang, Liu Yang, Yan LIU
	Automated Framework for Predicting Optimal Inspection Time to Detect Delamination of Building Envelopes Using Infrared Thermography Yike Hu, Jiatao Liu, Kunhan Lu, Zeyu Duan, Zhe Wang

- **S06**

Jun. 11th 4:00pm - 6:00pm	**S06: Indoor air quality, thermal comfort, productivity and health** **Location: Room 2304** **Chair:** **ZHANG Nan** **YANG Xiaochen** **Secretary:**

JIANG Mengqi

Residential particulate pollution in urban villages: Characteristics and influential factors
Chen Chen, Xiaoyi Xiao, Siyi Xie, Xinyao Liao, Zhiye Li

Budgeting health impacts for building ventilation: Balancing the energy-health nexus
Siu-Fung Fung, Volkan Doda, Ivan Korolijia, Dejan Mumovic

Flow Characteristics and Drag Reduction Optimization of Irregular Fittings in Aircraft Cabin Air Pipelines via Multi-Scale Numerical Simulation
Yuanyuan Zhang, Tianyu Zhao, Hejiang Sun*

A Ductless Relay Ventilation for Long-Distance Air Delivery in Deep-Plan Spaces
Wenchao Lv, Jiahao Zhang, Wenyi Han, Haiguo Yin, Angui Li

A Machine Learning Framework for National-Scale Indoor Radon Prediction
Chunxiao Su, Yiwei Zhu, Wei Liu, Zhenchang Zhong, Yi Shi, Zhimin Xu, Jiahui Wang

Octree grid refinement of lattice Boltzmann method-based LES for Indoor Hot Convective Airflow
Mengtao Han, Hideki Kikumoto, Ryozo Ooka

Assessment of data faults of building energy system (BES) in large public buildings based on multi-scale evaluation
Boyan Zhang, Wei Gao, Tianyi Zhao

Multi-scale analysis of PCM wall performance on residential building energy consumption and overheating in Harbin
Yuhan Zhao, Jiahui Yu, Bolun Zhao, Haibo Guo

Learning Effects as a Structured Source of Variance in Repeated Thermal-Cognitive Experiments
Sadia Israt Anam, Fan Zhang

Dynamic gaseous pollutant source term estimation indoors with experiment-based impulse response and non-smooth competing priors
Haoming Liang, Fei Li, Lei Wang, Sheng Fang

- S08

Jun. 11th 4:00pm - 6:00pm	**S08: Climate neutral building design and assessment; Building-grid interaction** **Location: Room 2404** **Chair:** **GANG Wenjie** **WU Zhibin** **Secretary:** **JIANG Huayu**
	Energy Management Strategy for Virtual Building-Cluster Microgrids Based on Semantic Mask-Enhanced DRL and Full-Temporal Contextualized V2B Configuration Ben Jiang, Tianyi Zhao
	Bidirectional building-grid coupling framework for quantifying operational vulnerability of power grid under heatwave Fang WANG, Wei LIAO, Fu XIAO
	A Solar-driven Liquid Desiccant Air-conditioning System Coupled with Absorption Heat Pump and Indirect Evaporative Cooling towards Low-carbon Buildings Kaiyin Yang, Yuming Sheng, Zhiyong Li, Yanling Zhang, Jielin Luo, Hongxing Yang
	GraphRAG-Based Intelligent Q&A System for BIPV Carbon Reduction: Workflow and Validation Shufan Duan, Dian Zhuang, Cheng Sun
	An Explainable Graph-Based Multi-Objective Framework for Low-Carbon Retrofit of Existing Campus Buildings Zhen Lei, Tong Zhang
	Passive Cooling Performance of Void–Pilotis Apartments in Tropical Cities: A Coupled CFD–BES Study under Different Terrain Conditions Floriberta Binarti, Wynsom F. Wiyarta, Mitsunaga Masaki, Tetsu Kubota
	The role of site and design: Assessing mixed-mode ventilation performance in real unban context under future tropical climates Siyu Cheng, Weilin Xin, Adrian Chong
	Climate Mitigation and Adaptation in Utility-Scale Photovoltaic Landscapes: An Integrated Microclimate-Ecology-Livelihood Assessment Dingyue Cui, Shi-jie Cao
	A Multi-Scale Evaluation Framework for Urban Wind Fields Prediction Models: From Single Building to Real Cityscapes Jinhui Tang, Longchao Wang, Longhui Xu, Sumei Liu, Runmin Zhao
	Parameterized design study of building façade air-conditioning unit shading under multi-scenario demand orientation in hot summer and cold winter regions of China Mo Yang, Wei Wang

- S10

Jun. 11th 4:00pm - 6:00pm	**S10: Urban micro-climate and heat island, Climate change mitigations and adaptations** **Location: Room 2405** **Chair:** **WANG Wei** **ZENG Zhaoyun** **Secretary:**

	HUANG Qiqi
	Mitigating extreme weather-induced power outages by electric vehicles to enhance urban energy resilience Shihong Zhang, Xinyu Wang, Qiqi Huang, Zhe Wang
	Coupled Impacts of Occupant's Behaviour and Energy Efficiency on Residential Cooling Energy Consumption During Heatwave Events Longkang Dai, Meng Liu, Qifeng Fan
	Temperature-Adaptive Radiative Coatings: Mitigating Climate, Energy, and Mortality Under Climate Extremes Tiancheng Zeng, Hungchen Tai, Jianmin Yang, Kaichen Dong, Shuai Lu
	Vegetation Cooling Pathways and tree-building Coupling Controls under Extreme Heat: A SCOPE and XGBoost–SHAP Analysis across LCZ Contexts Jinghan Pan, Wei Wang
	Partitioning Surface Forcing and Waste Heat Impacts of Rooftop Retrofitting Across High Density Urban Morphologies Siyuan Ren, Yukai Zou
	Balancing accuracy and efficiency in the dynamic downscaling WRF–LES simulations: Impacts of building resolution and terrain representation on urban wind patterns Qian Ma, Yini Fan, Pak Wai Chan, Jimmy Chi Hung FUNG, Xing Zheng
	Assessing Microscale Strong Wind Exposure in Hong Kong: A WRF-PALM and Observational Study during a Full Typhoon Evolution Yini FAN, Qian MA, Pak Wai CHAN, Xing ZHENG
	A Novel "Space-Sky-Ground" Multi-Source Data Assimilation Framework for the WRF-UCM Model to Enhance Urban Wind-Thermal Simulations Wei Xu, Yingxian Zhai, Lin Zhao, Guoxin Tang, Jianhua Nong, Wanyang Ma, zhaoming Huang
	Quantifying Urban Building-Sector Electricity Decarbonisation Gap under the Business-as-Usual Scenario: The Case of Hong Kong Qiqi Huang, Shihong Zhang, Xinyu Wang, Qinhui Lu, Zhe Wang
	Identifying High-Potential Cooling Shelters in Centralized Traditional Village: A Coupled Workflow of ENVI-met and Agent-Based Modeling Yiming Du, Anxiao Zhang, Qi Zhen, Hao Jing

- **S12**

Jun. 11th **4:00pm - 6:00pm**	**S12: Urban micro-climate and heat island, Climate change mitigations and adaptations** **Location: Room 2465** **Chair:** **ZHOU Jin** **CHEN Yongbao** **Secretary:** **WANG Xinyu**
	Sequence-Aware Prediction of Pedestrian-Level Air Temperature Using Urban Morphology in a Digital Twin Framework Ruohan Xu, Yu Qian Ang, Joie Lim, Marcel Ignatius, Yijun Lu, Shanshan Tong, Nyuk Hien Wong
	Spatio-temporal Distribution Patterns, Driving Factor Identification, and Spatial Heterogeneity Analysis of Fire Disasters in Hefei City

	Yi He, Sarula Chen, Yunfa Wu
	Comparative Analysis of Isothermal and Non-Isothermal Urban Airflow Using Wind Tunnel Experiments and Large Eddy Simulations Shaofang XU, Kaizhe SHI, Wei ZHANG, Wei LIU
	Research on Fast Indoor and Outdoor Flow Field Simulation Based on Fourier Neural Operator and Reduced-Order Model Xin Yang, Yiwei Yao, Hejiang Sun
	A "Space-Sky-Ground" Multi-Scale Data-Model Integration Framework for Urban Wind-Thermal Prediction: A Case Study in Subtropical Beibu Gulf Yingxian Zhai, Jianhua Nong, Wei Xu, Guoxin Tang, Wanyang Ma, Zhaoming Huang, Lin Zhao
	Spatial fire risk assessment of traditional villages in Huizhou based on machine learning and explainable AI Ziyan Fan, Sarula Chen, Yunfa Wu
	Impacts of void deck support structure layouts on pedestrian-level wind environment in a building array Yeyu Xiang, Jinjun Ye, Lup Wai Chew
	CFD Simulation of the Impacts of Vegetation on the Wind and Thermal Environment in a Sunken Plaza Ruibin Li, Xinzi Xu, Chenxing Wang, Yan Wu, Naiping Gao
	Assessing the Mitigation Effects of Wind-Driven Rain by Barriers in Building Verandas and Linkways Shan Huang, Shi Yin, Yiqiang Xiao, Yu Sun
	Research on VOCs emission mechanism of water-based paints: experiments and modeling XueQiong He, Shaodan Huang

- **S14**

Jun. 11th 4:00pm - 6:00pm	**S14: Climate neutral building design and assessment; Building-grid interaction** **Location: Room 2502** **Chair:** **Maomao Hu** **Yang Geng** **Secretary:** **LU Kunhan**
	Anomaly Detection of Building Energy Consumption based on Spatiotemporal Feature Fusion Siliang Ma, Zaihui Lin, Weinuo Huang, Wanfa Deng
	A multi-level custom parameter method for building energy modeling Guangchen Li, Yixing Chen
	Evaluating and Optimizing Chiller System Performance in Pharmaceutical Facilities: A Data-Driven Clustering Analysis Yu Ma, Yu Yang, Jiawei Shi, Wenxuan Zhao, Rongpeng Zhang
	Efficient Operation Optimization for Heterogeneous Chiller Plants under Real-Time Demand Response: An Input Convex Neural Network-assisted Approach Dongmei Jia, Zhiwei Li, Shasha Song, Chunwen Xu, Peng Wang, Shanshuo Xing

An Application Framework for Probabilistic Forecasting and Uncertainty Quantification of Urban-Scale Building Cooling Sources
Jide Niu, Yumeng Yang, Zhe Tian, Xiaoyuan Li, Jing Zhao, Yakai Lu

Enhancing early-stage sustainable design: Transferable graph neural network surrogates for residential zone performance prediction
Zhaoji WU, Feng WANG, Qingyan CHEN

Physics-Informed Self-Calibration of Multi-Dimensional Monitoring Variables in Chiller Plants
Fan Wu, Cheng Fan

Development and Application of a High-Fidelity Virtual Simulation Test Platform for Data Center HVAC Systems
Chuang Ye, Zhe Tian, Xiaochi Yang

Decision-Focused Model Predictive Control for Fixed-Frequency HVAC System
Yunqin LIU, Huayu JIANG, Zhe WANG

Steady-State Detection for chiller modelling
ZHINENG JIN, SI WU, ZHE WANG

June 12th

- S15

Jun. 12th 1:30pm - 3:30pm	**S15: Climate neutral building design and assessment, Building integrated renewable energy** **Location: Room 2302** **Chair:** **ZHAO Dongliang** **ZHANG Xiang** **Secretary:** **LIN Jinxi**
	A deep learning and modified Rayman model integrated method for accurate city-scale assessment of building rooftop solar energy potential Chengliang Xu, Yaohui Hu
	Carbon reduction optimization planning for regional photovoltaic and radiation-cooled roofs under complex roof availability conditions Chengliang Xu, Xinyue Shen
	Poured Earth Technology: Low-Carbon Construction Methods and Practice in Rural Areas Junjie LI, Yi DU, Qian YU, Yichun JIN, Xinchen GUO
	Shadow Pricing the Urban Facade: Decoupling Energy Yield from Carbon Asset Value in BIPV Design YI YAN, Ling Mao, Changying Xiang
	Knowledge-Graph-Guided Fault-Tolerant MPC for Chilled Water Plants Huaiyu Yang, Zhiyi Zheng, Wanpeng Zhang, Guanjing Lin
	Anisotropic Thermal Conductivity Calculation Model Based on the LBM Method Liping Yang, Qing Liu, Shuoyan Wang, Liu Yang, Yan LIU
	Influence of Thermal Radiation Characteristics of Building Envelope Surfaces on Building Cooling and Heating Loads Yutao Liu, Mengfan Duan, Dongliang Zhao
	Analysis of Hybrid Air–Liquid Cooling System for Servers under Dynamic Workloads Wenjie Pan
	A Hybrid Method Integrating Physical Model and Residual Neural Network for Rapid Calibration of Medium-Deep Borehole Heat Exchangers (MDBHE) Qilin Zhang, Yixing Chen
	Exploring the Impact of Functional Organization on Building Energy Consumption: A Graph Neural Network Approach with Explainability Analysis Minghao Liu, Zhonghua Gou

- S16

Jun. 12th 1:30pm - 3:30pm	**S16: Passive and active design strategies, Generative design, data-driven modelling, and LLM** **Location: Room 2303** **Chair:** **SUN Yongjun** **XIE Yongxin** **Secretary:** **LI Yanjie**
	High-Fidelity Rapid Daylighting Simulation for Complex Interfaces via Multi-modal Fusion Diffusion Models Zhaoyang Luo, Cheng Sun, Yunsong Han
	FiLM-Conditioned Convolutional Neural Networks for Indoor CFD Surrogate Modeling Yanjie Li, Zhe Wang, Lige Zhao, Dengbo He, Yongxin Xie
	Comprehensive energy saving for industrial building rooftop photovoltaic in representative cities of four climate zones in China: A simulation study Zhixiao Zhao, Zhixiang Cao, Tongtong Zhao, Chao Zhai, Yi Wang
	Seasonal differences in driving factors of residential building carbon emissions in hot-summer and cold-winter region: a case study in Wuhan Sujie Shen, Yuhao Qiao, Shuxin Jiang, Feiyi Li, Liu Yang
	Comparing DDPM and DDIM for Probabilistic Building Energy Forecasting Under Data-Scarce Conditions Haihui He, Cheng Fan
	Performance of conditional diffusion models across limited data scenarios for building energy probabilistic forecasting Haihui He, Cheng Fan
	Adaptive Construction Method for Building Energy Knowledge Graphs Based on Large Language Models Bingyi Wang, Jian Zhang, Zeyu Zheng, Yang Zhao
	A Physics-First Layered Framework for Satellite-Derived Solar Irradiance Datasets Rosaria Volpe, Sahand Pourhmadisangestani, Alberto Fichera
	From Natural Language to Deployable Building Automation Control Logic: An LLM-Assisted Generation Framework for Building Automation Systems QingBin Lin, Lun Zhang, Xin Zhou
	An LLM-EnergyPlus Multi-Agent Collaborative Framework for Autonomous Building Energy Optimization Nana Shi, Jun Xiao, Ziyue Tang, Borong Lin, Haizhu Zhou

- S17

Jun. 12th 1:30pm - 3:30pm	**S17: Indoor air quality, thermal comfort, productivity and health** **Location: Room 2304** **Chair:** **LI Yanxue** **CAO Xiaodong** **Secretary:** **NI Shuangshuang**
	Multi-scale Performance Assessment of Passive PV Cooling Synergized by Passive Dehumidification Keru Shang, Mengying Li, Shauhrat S. Chopra, Wei Wu
	Internal or External? Comparing Energy and Overheating performance of insulating strategies in Shanghai Residential Building retrofit Hongjuan Liao, Feng Yang
	Multi-objective collaborative control of mixed-mode buildings in hot and humid regions driven by Standard Effective Temperature Chang Yin, Xia Deng, Feng Shi
	Experimental Investigation of Room-Scale Interference in Multi-Fan Ceiling Arrays Roman Buckle, Fangyu Liu, Wei Liang, Shanrui Shi, Eikichi Ono, Shohei Miyata, Adrian Chong
	Comfort-Oriented Cooling Energy Optimization in Office Buildings through Natural Ventilation and Phase Change Materials under Urban Conditions Sirui Hu, Xiangmin Guo
	Performance of a multi-vortex ventilation system for removing widely-dispersed water mist: Field investigation, full-scale experiments, and numerical simulations yuqing Bai, Chen Zhang, Yi Wang, Zhixiang Cao, Zefang Yang, Chao Zhai, Pan Liu, Tongtong Zhao
	A Data-Driven Analysis of Indoor–Outdoor Environmental Interaction Characteristics of Existing Residential Buildings in Severe Cold Regions Dayang Wang, Qi Dong
	Mass Housing Spatial Morphology and the Use of Common Spaces: Perception, Comfort, and Social Interaction — A Case Study of Mohammedia, Morocco Kaoutare AMINI ALAOUI, Youssef JAMIL, Laarbi BARHAZI
	A morphing-enabled workflow for classroom overheating risk screening under future climates Yilin Wang, Nazli Bin Che Din, Ziad Baydoun
	A validated mechanistic model for indoor bioaerosol fate and transport across air, surfaces, and porous materials Zhuo Chen, Wei Wu

- S18

Jun. 12th 1:30pm - 3:30pm	**S18: Climate neutral building design and assessment; Building-grid interaction** **Location: Room 2404** **Chair:** **Floriberta Binarti** **TANG Hao** **Secretary:** **HU Yike**
	Resilience-Informed Optimal PV-Battery Sizing for Grid-Responsive Building Communities Against Extreme Weather Events **Qinhuan Liu, Maomao Hu**
	A Climate-Adaptive Building-Integrated Photovoltaic (BIPV) Facade Morphology Generation Framework Based on AI Algorithms and Bayesian Prior Parametric Skins **Chao Yang, Yao Fu, Tianheng Zhang**
	Battery capacity selection for building photovoltaic–battery systems considering time-of-use tariffs and control capability levels **Xiaoqian Zhang, Yixing Chen**
	Performance-based Parametric Design of Covers on Urban Facade Air-conditioning units Considering Pedestrian Dynamic Visual Perception **Nisso Satorova, Wei Wang**
	Temperature-Adaptive Radiative Coating achieves cross-seasonal carbon reduction for High-Rise buildings through an assessment of 200 climate-diverse cities **HUNG CHEN TAI, Tiancheng Zeng, Kaichen Dong, Shuai Lu**
	Study on Key Influencing Factors and Cross-Scale Evolution Mechanisms of Thermal Resilience in Residential Building Clusters under Climate **Xiaochen Yang, Jianwei Li, Hongxin Tian, Zhe Tian**
	Simulation-Based Assessment of Smart Adaptive Façade Retrofits for a Tall Office Building in London **Farhan Ishrak, Tania Sharmin**
	Hierarchical thermal modeling for grid-interactive buildings: Decoupling VRF operational heterogeneity and latent gains under data-missing **Jiahui Li, Xinyi Lin, Zhe Tian, Yakai Lu, Jide Niu**
	Spatial Inequality of Solar Radiation Reception Dynamics during Urbanization: Evidence from Nanjing (2000-2020) **Yifan Guo, Wei Wang**

- **S19**

Jun. 12th 1:30pm - 3:30pm	**S19: Passive and active design strategies, Generative design, data-driven modelling, and LLM** **Location: Room 2464** **Chair:** **WU Yan** **QIAN Mingyang** **Secretary:** **JIANG Huayu**
	Reverse Temporal Inference for Building Age Identification Using Historical Satellite Imagery and Spatial Rules Xinyue Zhang, Xin Zhou
	From Multi-Sensor Point Clouds to BIM: Non-Destructive Reconstruction of Interior Structures in Historic Buildings Kunhan Lu, Yike Hu, Zeyu Duan, Zhe Wang
	A Multi-Source Data Fusion Framework for Identifying Aging Residential Communities for Urban Renewal Chengjin Wu, Yixing Chen
	Enhancing the Fidelity of Coarse Grid Indoor Airflow Simulations via Graph Neural Networks Zhenyu SUN, Wei LIU
	Simulation-Based Energy and Daylight Performance of Modular UHPC Curved Façade Building Across ASHRAE Cold Climate Zones 6–8: Hohhot, Harbin, and Norilsk Michael Anharlintama Tjiongnotoputera, Wai Phyo Aung, Hong Zhang
	Tiny-AMPC: A Quantized Multi-Layer Perceptron (MLP) Framework for Mixed-Integer Model Predictive Control Huayu Jiang, Yunqin Liu, Zhe Wang
	Eigen-Entropy-based feature extraction from quantile-clustered graphs for simulation-to-real fault detection in building HVAC systems Jiajing Huang
	A Personalized Federated Learning Method for Building Energy Prediction with Low-Quality Data Hang Zeng, Cheng Fan
	Evaluation of LSTM-Based Update Algorithms for Office Building HVAC Load Prediction Yongjie Wang, Weining Zhang, Guanjing Lin
	Physics-Informed Bayesian Neural Networks for Robust Chiller Sequencing Control in Large-Scale Public Buildings Shuhao LI, Zhe Wang

- **S20**

Jun. 12th 1:30pm - 3:30pm	**S20: Urban micro-climate and heat island, Climate change mitigations and adaptations** **Location: Room 2465** **Chair:** **SUN Xiaoqin** **AN Jingjing**

Secretary:
ZHANG Shihong

An Estimation Framework for Capturing the Part-Time Part-Space Energy Use Characteristics of Residential Buildings
Jingjing Yang, Yi Wu, Da Yan

Optimizing Retrofit Investments Pathways for Real Estate Portfolio Decarbonization
Shihong Zhang, Xinling Li, Gioele Zardini, Siqi Zheng

Study on the Dissemination Mechanism and Intervention Strategies of Energy Saving Behavior among Building Occupants
Xiao Runjin, Liu Sha, Sun Yichao, Luo Yaning

Data-Driven Mixed-Mode Ventilation Control via Inverse Reinforcement Learning
Wei Liang, Chong Adrian

OPTIMIZING COOLING INFRASTRUCTURE: A VULNERABILITY-BASED SPATIAL PLANNING APPROACH FOR BEIJING
Jiafeng CHEN, Lun LIU

City-scale assessment of thermotropic glazing–driven urban building energy use under future climate scenarios
Yilin You, Manli You, Xiang Liu, Lin Yang, Xuan Yang, Xiaoqiang Hong, Meng Wang, Rui Jing, YuQian Ang, Feng Shi

Assessing the Flexibility of District Heating Systems via Dynamic Simulation of Building and Network Thermal Inertia
Naijun Xu, Wenjia Chu, Shiming Tang, Liang Han, Baoping Xu

Fast Evaluation of Demand Response Potential for District Cooling System by Using Physics-Informed Neural Network
Yiwen Chen, Siqi Wang, Zhuang Zheng

Reducing the environmental impact of data center cooling through optimal integration with district thermal network
Sicheng Zhan, Daniela Carrasco, Les Norford

Improving HVAC Energy Efficiency using Raw Signal CNN Leak Detection in Hydronic Networks
Beenish BAKHTAWAR, Tarek Zayed

- **S21**

Jun. 12th 1:30pm - 3:30pm	**S21: Smart grid, microgrid, and optimization of energy networks; Building-grid interaction** **Location: Room 2502** **Chair:** **HUANG Gongsheng** **LI Guannan** **Secretary:** **HU Ziqi**
	Community power system optimization under power-outage scenarios in different seasons based on smart photovoltaic-battery-vehicle-building interactions Chengyu Zhang, Tianyi Zhao
	Fast Flexibility Quantification and Resilience Evaluation for Building Air-conditioning Systems Zhe Chen, Yongbao Chen, Fu Xiao
	Data-Driven Chance-Constrained Aggregation of Residential Air Conditioners under Decision-Dependent Uncertainty via Survival Analysis HouZe Jiang, ShiLei Lu, Ran Wang
	Co-optimization of multi-zone thermal storage and HVAC dynamics for enhanced flexibility control Zhe Tian, Xiaochi Yang, Jie Zhu, Jide Niu, Chuang Ye, Yakai Lu
	A Reinforcement Learning–Based Scheduling Method for Multi-Energy Systems Oriented to Dynamic Carbon Emission Responsibility Factors of Electricity Yanbing Jia, Shilei Lu, Pengbo Zhang
	Trustworthy Customer Baseline Load Aggregation in Demand Response via Federated Learning with Reputation Scoring Zhiwei Li, Zhenshang Wang, Yuming Zhao, Jing Wang, Junyao Gao, Hangxin Li, Shengwei Wang
	Hardware-in-the-Loop Simulation for Benchmarking Building HVAC Control Strategies Sen Huang
	A Scalable Dynamic Coupled Model for Urban Rooftop Photovoltaic Systems performance and urban temperature response prediction Using LOD Methods Yueer He, Ye Hong, Xingwen Xi, Zhenyu Zhu, Jiayao Qin
	Orthogonality-constrained basis driven model predictive control for few-shot adaptation in HVAC system control Ziqi Hu, Zhe Wang
	Building-Integrated PV and EV-Based Energy Sharing: A C2V2C Framework for Community-Level Energy Coordination Pei Huang

Detailed Poster Session

Jun. 11th 3:30pm - 4:00pm	Location: Poster
	1. Human thermal stress characterization based on multidimensional physiological-perceptual fusion: a deep learning-driven construction of an individualized warning index (IHSI) Yudong Mao, Peng Zhang, Xiwen Feng, Zhaosong Fang
	2. Biomimetics for Energy-Efficient Buildings: A Literature-Based Quantitative Framework Across Climate Zones Chenxi Shi, Wei Wang, Xiangfeng Li
	3. Quantifying Neighbourhood Spillover Effects in Urban Thermal Environments: A Physics-Informed Hybrid GNN-XGBoost Framework Jiachen Bu, Ziyu Tong, Zihao Wu, Ruize Wu
	4. A Simulation Framework for Evaluating Architectural Spatial Performance Using Agent-Based Modeling Song Junbo, Jiayuan Zhang, Weiya Chen
	5. Assessing the Suitability of PMV and Adaptive Comfort Model for Tropical Mixed-Mode Ventilation Yue Lei, Jiahao Wang, Thomas Parkinson, Bin Cao, Adrian Chong
	6. City-scale identification of glass curtain walls for facade photovoltaic potential assessment Zishang Zhu, Haida Tang, Jinhan Mo
	7. Flame-Resistant Electrolyte for High-Voltage Lithium Batteries: Enhancing Thermal Safety and Cycling Stability in Building-Integrated Energy Storage Systems Jiaojiao Deng, Junquan Chen, Jinhan Mo
	8. Suppressing Load Rebound: A Time Sequence Optimization Method for AC Clusters Considering User Compensation Adjustment Behavior Boyang LI, Shilei Lv, Ran Wang
	9. U-Net-Based Convolutional Neural Network for Urban Sectional Wind Environment Prediction Jihua Huang, Shi Yin
	10. Carbon Emission Accounting and Configuration Optimization of Multi-source Solar Energy Collaborative Heating Systems in the Loess Plateau Region Jiale Zhou, Jiale Zhu, Xiaojun Zhou
	11. Construction and Optimization of a Solar Thermal Power Conversion Energy Supply Model for the Qinghai-Tibet Plateau Region Weijie Tian, Cong Song, Dengjia Wang, Yanfeng Liu
	12. Simulation and Improvement Strategies for Outdoor Thermal Comfort in Older Residential Areas from a Local Climate Zone Perspective Yue Fan, Zhuo Zhang, Hongfeng Zhong, Jie Chen
	13. Synergistic “Source-Storage-Scheduling” Co-optimization for Green Microgrids: A Nested Bi-level Approach Considering PV Orientation Libo Yu, Xuanting Lu, Tian Sun, Aili Ablimit, Gang Tan
	14. Interdependency between energy flexibility and morphological characterization of district building space heating system Yanxue Li, Chengru Wang, Yingjun Ruan

15. A novel graph convolutional network and building shad-ing effect integrated method for urban building energy consumption forecasting
Chengliang Xu, Rongmian Cheng, Guannan Li, Xinyue Shen

16. The Impact of Urban Building Morphology and Albedo on Shortwave Radiation Transfer in Realistic Urban Geometry
Liangxin Tong, Shuojun Mei, Ting Sun

17. Development and Experimental Validation of a Dynamic Model for Decoupled Radiant Cooling Panels
Yizhen Li, Gongsheng Huang

18. Explainable Surrogate Model to Reveal the Mechanism of Residential Neighbourhood Morphology on the Synergistic Performance of Light-Heat-Energy: A Case Study of Shanghai
Yucheng GUO, Yue TENG, Jie Shi

19. Improving Aerodynamic Resistance Parameterization for Strongly Buoyant Urban Canopy Turbulence Using Large-Eddy Simulation
Shiyi Hu, Shuojun Mei, Ting Sun

20. Physics-Informed Neural Networks for Building Thermal Modelling: Integrating Inter-Zone Dynamics for Robust Generalization
LUNLONG LI, Ziqi HU, Parastoo MOHEBI, Zhe WANG

21. Thermal–Cardiovascular Responses to Hot–Humid Exposure: Age and Sex Effects in a Chamber Study
Han Liu, Xianzhun Zhong, Peiyang Du, Yongxin Xie, Jianlei Niu

22. CFD-RSM Optimization of Fan-Assisted Ventilation in Street Stores
Xiaofei Han, Mingyuan Qin, Tian Xia

23. Enhanced Anti-Condensation Performance of Decoupled Radiant Cooling System by Integrating Fresh Air Ventilation
YUJIAO DU, GONGSHENG HUANG

24. Acoustic Imaging for Energy-Efficient and Climate-Neutral HVAC Noise Management
Kuen Wai Ma

25. Research on the Energy-saving Performance Analysis and Parametric Optimization of Window Insulation Layer for Industrial Buildings in Severe Cold Regions of Northeast China
Meng Chen

26. Deconstructing Negative Spaces in High-Density Cold-Climate Residential Areas: A Case Study of Yanbao·Baiwan Jiayuan, Beijing
Ke Ding, LI He

27. Calibrated Simulation and Explainable Modeling of Thermal Buffering in Cold-Region Transitional Spaces during Extreme Events
Peng Gao, Zixuan Cui, Yongming Huang, Xiaoyang Li

28. Research on Neural Network-based Thermal Performance Prediction Model for Pit Thermal Energy Storage (PTES)
Ying Chen, Yong Li, Renfeng Wei, Yanfeng Liu

29. Critical Pipe Identification in District Heating Networks under Independent and Cascading Failure Scenarios
Ding Mao, Linhua Shen, Wei He

30. Developing Residential Buildings Archetypes for Single-Storey Houses in India
Charles Divyateja Bontha, Aakash C. Rai

31. Thermal Dynamics and System Optimization of Distributed Solar Energy Systems under Bidirectional Energy Flow Conditions
Zhengping Shi, Qingwei Miao, Man Fan, Xiangfei Kong, Jianjuan Yuan, Han Li, Ziqi Zhao, Zheng Li

32. Aerodynamic Performance of Integrated Rooftop Louvre Blade Designs for Urban Wind Energy Harvesting
Wan-Yi Chen, Ting-Yu Wei, Zhengtong Li, Yu-Hsuan Juan

33. Synergistic Optimization of Multi-depth Closed-loop Geothermal Systems for Seasonal Thermal Energy Storage
Yudong Yan, Qing Xia, Xiong Yang, Hangyu Li, Wanlong Cai, Fenghao Wang

34. An Interpretable Spatio-aware Fault Detection and Diagnosis Framework for Central Cooling Systems using Graph Attention Mechanisms
Huimin Yao, FU XIAO

35. Paired field evidence for quantifying thermal buffering in campus transitional spaces: a calibration-oriented framework
Shenghua Liu, Yang Ni

36. LLM-Driven Generative Design for Climate-Adaptive Net-Zero Buildings
Arts Cheung, YuXin Ren, LiuXin Zhao, Qi Wang, Cheuk Hei Alfred NG, Jun Yin, Haoran Tang, Xiang Deng, Jing Zhong, Wai Ning Louie, JADE JIANG, YAN GAO

37. Defining Minimum Viable Fidelity for Building Systems: A Sensitivity Analysis of Simulation-Reality Discrepancy in Generative Fault Diagnosis
Jintong Han, Adrian Chong

38. Building cooling load generation method based on diffusion model and knowledge fusion
Chen Huang, Shilei Lu, Ran Wang

39. Integrated Digital Twin Framework for Enhancing Thermal Comfort and Health of Older Adults During Heatwaves: A BIM and IoT Approach
Mingyang Tao, Zhonghua Gou

40. Reassessing Mixed-Mode Ventilation Potential in Tropical Cities by Incorporating Fan-Induced Air Movement
Kazuki Horikoshi, Federico Tartarini, Adrian Chong

41. An Automated UAV–CFD Framework for Multi-Element Urban Ventilation Assessment in High-Density Cities
Xiaotian Geng, Zhonghua Gou

42. Multi-Building Coordinated Control of Grid Voltage on a Physics-Based Simulation Platform Using Constrained Reinforcement Learning
Ziyan WU, Rui TANG

43. Moisture Accumulation and Mould Growth Risk in Externally Insulated Brick Masonry Walls: Evidence from In-Situ Experiments
Jaberswamy S, Aakash C. Rai

44. Evolving LLM-empowered Multi-Agent System for Autonomous Building Energy Modelling and Analysis Using Multimodal Data
Tianyi Zhang, Yu Li, Xi Chen, Ben M. Chen

45. **Improving WRF-UCM Performance in the Guangfo Metropolitan Area: Integration of LCZ-POI Data and Dynamic Anthropogenic Heat Feedbacks**
Huiwang Peng, Qiong Li, Yu Huang, Renzhi Wu, Jianwei He, Haotian Wu, Shuo Jiang

46. **Safety-Oriented Micromobility Infrastructure Planning for Climate-Neutral Cities: A Near-Miss Assessment in Kuala Lumpur**
Jiali Zhu

47. **A Multi-Principle Sensor Array with Matrix Decoupling for Accurate VOCs Identification in Indoor Environments**
YAN Wang, Jinhan Mo

48. **Operational Optimization Strategy for Building Integrated Energy Systems Based on Deep Reinforcement Learning**
Bingxu Zhao, Xiaodong Cao, Haifen Ye

49. **Modeling of Evaporation and Shading Coupled Cooling Mechanisms for Transparent Roofs with Water-Mist Systems**
Huijun Mao, Qinglin Meng, Junsong Wang, Xiaoyang Lv, Ling Fang

50. **Sustainable power and thermal system**
Zhikui Zhong, Qingqing Pei

51. **Theory and Engineering Projects of HVAC System of "Two Energies and Three Features"**
Zhikui Zhong, Qingqing Pei

52. **A comprehensive physiology-based model for assessing outdoor microclimates in warm-biased conditions**
Ying Jiang, Yongxin Xie, Jianlei Niu

Detailed Workshop Session

- **Workshop 1: Systematic reduction of lifecycle carbon emissions of the building stock of high-density cities**

Chair/Co-Chair:
Dr Cong Yu, The University of Hong Kong, China,

yucong@hku.hk

Dr Jingjing Yang, Tsinghua University, China,

jjyang@mail.tsinghua.edu.cn

Secretary: JIANG Mengqi

Location: RM 2464

Content of the Workshop

The building industry worldwide accounts for around 34-37% of the global carbon emissions. The percentage is particularly pronounced in high-density cities. Energy conservation and carbon reduction are critical and urgent in high-density cities, considering the ambitious carbon neutrality goals and the IPCC's target of limiting global warming to below 1.5°C by 2100. Consequently, the analysis and mitigation of building-related lifecycle carbon emissions (LCCE) become essential to achieving the goals. Analyzing LCCE at the city level is increasingly important, as the cumulative emissions from the building stock significantly contribute to overall city carbon output. It can more comprehensively identify and evaluate the carbon footprint of each stage, discover the main sources of carbon emissions, and thus take effective emission reduction measures.

This workshop aims to advance systematic analysis and mitigation strategies for lifecycle carbon emissions of the building stock in high-density cities, fostering in-depth discussions and collaborative research among researchers to support accelerated progress toward carbon neutrality targets and the IPCC's 1.5°C warming limit.

Proposed Presentations

Time	Topic	Speaker
15 min	Urban Building Energy Models and Electrification in Canada: Optimizing Retrofits to Enable Cross-sector Decarbonization	Professor Liangzhu Leon Wang Concordia University, Canada leon.wang@concordia.ca
5 min	Question and discussion	
15 min	Life Cycle Global Warming Potential of Optimized PV System in the Built Enviornment	Professor Xingxing Zhang Dalarna University, Sweden xza@cdu.se
5 min	Question and discussion	
15 min	Research on Energy Consumption of Urban Residential AC from the Perspective of Energy Sufficiency and Considering Supply and Demand Characteristics	Associate Professor Xin Zhou Southeast University, China zhou-x06@seu.edu.cn
5 min	Question and discussion	
15 min	Reducing the embodied carbon in Hong Kong's permanent living quarters through concrete modular integrated construction	Dr. Siwei Chen The University of Hong Kong, China swchenly@connect.hku.hk
5 min	Question and discussion	
15 min	Assessing the Impact of Meteorological Data Spatial Resolution on Rooftop Photovoltaic Potential of Urban Buildings	Dr. Jingjing Yang Tsinghua University, China jjyang@mail.tsinghua.edu.cn
5 min	Question and discussion	
15 min	Climate adaptation and mitigation of energy efficiency and decarbonization in high-rise buildings: Case study of Hong Kong	Mr. Yumin Liang The University of Hong Kong, China ymliang@connect.hku.hk
5 min	Question and discussion	
30 min	Panel Discussion	Moderator:Professor Alfonso Capozzoli Politecnico di Torino, Italy alfonso.capozzoli@polito.it

■ Workshop 2: AI-Driven Urban Wind and Microclimate Simulations for Sustainable City Development

Chair/Co-Chair:
Professor Liangzhu Leon Wang, Concordia University, Canada,
leon.wang@concordia.ca
Dr. Geng Tian, Concordia University, Canada,
geng.tian@concordia.ca

Secretary: LU Qinhui

Location: RM 2464

Content of the Workshop

Building simulation plays a vital role in building environmental engineering and urban physics, enabling the analysis of urban wind fields, microclimate dynamics, thermal comfort, pollutant dispersion, and climate resilience across building and city scales. However, high-fidelity computational fluid dynamics (CFD) approaches—such as large-eddy simulation (LES)—remain constrained in practice by high computational cost, long spin-up times, and difficulties in scaling to realistic and heterogeneous urban morphologies.

Recent advances in artificial intelligence, particularly operator-learning frameworks such as Fourier Neural Operators, have opened new pathways for AI-enhanced urban wind and urban climate simulation. These developments not only advance theoretical modeling and physical understanding, but also enable large-scale data generation, benchmark construction, and open data sharing for urban flow and climate research. This workshop will bring together researchers and practitioners to exchange recent progress in theoretical foundations, data-driven methodologies, standardized datasets, and hybrid physics–AI frameworks, as well as their integration with accelerated CFD/LES and digital twin systems.
The workshop aims to promote the synergy between theory, open data, and real-world applications in AI-enabled urban wind and urban climate modeling, fostering reproducible research, community-wide data sharing, and practical deployment in areas such as pedestrian wind comfort, urban heat mitigation, ventilation design, and climate-resilient city planning.

Proposed Presentations

Time	Topic	Speaker
15 min	The Effectiveness of Different Physics Priors for AI-Accelerated Urban and Built Environment Simulation (**online presentation**)	Chin Chun Ooi, Researcher IHPC, Singapore E-mail ooicc@ihpc.a-star.edu.sg
15 min	Feilian: A Machine Learning Model Family for Urban Microclimate Evaluation and Urban Canopy Parameterization (**online presentation**)	Negin Nazarian, Professor and Jiachen Lu, Researcher University of New South Wales, Australia E-mail n.nazarian@unsw.edu.au
15 min	Optimizing Urban Morphology for Thermal Environment and Air Quality: A Two-Way Coupled CFD and Multi-Objective Framework	Pengyuan Shen, Assoc. Professor Tsinghua SIGS, China E-mail shenpengyuan@sz.tsinghua.edu.cn
15 min	Graph Neural Network for 3D Real-time Urban Wind Field Reconstruction and Prediction toward Low-Altitude Flight Safety	Haidong Wang, Professor University of Shanghai for Science and Technology, China E-mail whd@usst.edu.cn
15 min	A Hierarchical Generative-Refinement Framework for High Resolution Microclimate Modelling and Sensor Placement Optimization (**online presentation**)	Xu Han, Assi. Professor University of Notre Dame, USA E-mail xhan7@nd.edu
15 min	Accelerating Large Eddy Simulations of Urban Airflow with Two Generative Adversarial Networks-based Architectures	Wei Liu, Professor Tianjin University, China E-mail weiliu@tju.edu.cn
15 min	Accelerating Urban Microclimate Simulation with Tree Modelling Using a ANN–CFD Framework	Ruibin Li, Researcher and Jiwei Zou, Researcher Hong Kong Polytechnic University, China E-mail ruibinpolyu.li@polyu.edu.hk and jiwei.zou@polyu.edu.hk

■ Workshop 3: Generative Agent-Driven Collaborative Architectural Design for Carbon-Neutral Future

Chair/Co-Chair:
Professor Han Yunsong, Harbin Institute of Technology, China, hanyunsong@hit.edu.cn
Associate Researcher Zhuang Dian, Harbin Institute of Technology, China, zhuangdian@hit.edu.cn

Secretary: CHENG Ip

Location: RM 2405

Content of the Workshop
Building sector is a major contributor to global energy consumption and carbon emissions, making deep decarbonization in this field a critical challenge in addressing the climate crisis. Traditional low-carbon design heavily relies on designer experience and disparate tools, facing bottlenecks such as low efficiency, difficulties in multi-objective trade-offs, and lagging performance prediction.

In this workshop, we will introduce and apply the "Generative Agent-based Whole-Process Green Building Computational Design Platform". This platform utilizes generative AI agents to simulate a multi-disciplinary expert team. It is capable of understanding natural language instructions, automatically invoking analysis tools, conducting real-time performance simulation and carbon assessment, and providing data-driven optimization strategies.

Centered around a real-world architectural decarbonization design challenge, the workshop will allow participants to experience this new human-AI collaborative paradigm of "conversation as design". Assisted by the intelligent design assistant, participants will complete the entire process—from carbon footprint baseline analysis and decarbonization goal setting, to low-carbon scheme generation and iteration, and finally multi-objective performance optimization. Throughout this process, they will explore innovative methods to seek optimal solutions balancing spatial form, material construction, energy systems, and carbon constraints.

The core curriculum of the workshop will cover: the application principles of generative AI and multi-agent systems in architectural design, whole-life carbon accounting methodologies and standards for buildings, and strategies for natural language interaction and agent task planning based on the platform.

Proposed Presentations

Time	Topic	Speaker
15min	Topic 1（TBD）	Jianxiang Huang，Associate Professor Tsinghua Shenzhen International Graduate School jxhuang@sz.tsinghua.edu.cn
2min	Question and discussion	
15min	Topic 2（TBD）	Adrian Chong，Associate Professor National University of Singapore bdgczma@nus.edu.sg
2min	Question and discussion	
15min	Topic 3（TBD）	Xilei Dai，Professor Chongqing University xileidai@outlook.com
2min	Question and discussion	
15min	Topic 4（TBD）	Vincent Gan，Assistant Professor National University of Singapore vincent.gan@nus.edu.sg
2min	Question and discussion	
15min	Topic 5（TBD）	Xing Zheng，Assistant Professor City University of Hong Kong xzehng@cityu.edu.hk
2min	Question and discussion	
15min	Generative Agent-based Whole-Process Computational Design Exploration	Dian Zhuang，Associate Researcher Harbin Institute of Technology zhuangdian@hit.edu.cn
2min	Question and discussion	

- **Workshop 4: Energy interaction between buildings and electric vehicles towards grid decarbonization**

Chair/Co-Chair:
Associate Professor Zhe Wang, The Hong Kong University of Science and Technology, China,
cezhewang@ust.hk
Assistant Professor Xiaochen Liu, Tsinghua University, China,
lxc4@tsinghua.edu.cn

Secretary: ZHAO Lige

Location: RM 2405

Content of the Workshop
Towards carbon neutrality, vehicles and buildings, as the two main demand-side sectors, will constitute the largest electricity load components and the most significant sources of stochastic fluctuation in future cities, posing challenges to the safe, economical, and low-carbon operation of power systems. Urban buildings and vehicles are inherently coupled: vehicles spend long time parked in or around buildings where charging takes place. If they are coordinated, it can not only meet their respective energy demands, but also jointly facilitating the low-carbon energy transition of cities.

This workshop aims to explore recent advances in the energy interaction between buildings and electric vehicles, including urban-scale potential analysis, intelligent regulation of equipment and systems, battery safety and lifespan impacts, user behaviors, and representative pilot projects.

Proposed Presentations

Time	Topic	Speaker
15min	Topic 1: TBD (online)	Minda Ma, Professor Chongqing University, China E-mail: minda.ma@cqu.edu.cn
2min	Question and discussion	
15min	Topic 2: Performance Regulation Technology for Electric Vehicle Batteries Based on Wide-Frequency Amplitude Pulse Current	Yalun Li, Associate Professor Beihang University, China E-mail: yalunli@buaa.edu.cn
2min	Question and discussion	
15min	Topic 3: AI Powered Low-carbon Management of Building Energy Systems	Yi Wang, Assistant Professor The University of Hong Kong, China E-mail: yiwang@eee.hku.hk
2min	Question and discussion	
15min	Topic 4: Energy Interaction between Buildings and Electric Vehicles: Potential Analysis and Demonstration Projects	Xiaochen Liu, Assistant Professor Tsinghua University, China E-mail: lxc4@tsinghua.edu.cn
2min	Question and discussion	
15min	Topic 5: A Model-Based EV Driving Range Assessment with Genetic-Algorithm-Optimized Motor Waste Heat Recovery Strategies	Lige Zhao, PhD candidate Hong Kong University of Science and Technology, China E-mail: lzhaobc@connect.ust.hk
2min	Question and discussion	

■ Workshop 5: Multi-dimensional modelling, flexibility and decision support for climate-neutral districts

Chair/Co-Chair:
Prof. Rosaria Volpe, University of Catania, Italy,
rosaria.volpe@unict.it
Prof. Xingxing Zhang, Dalarna University, Sweden,
xza@du.se

Secretary: LIU Jiatao
Location: RM 2306

Content of the Workshop

Building simulation has traditionally focused on single-building performance, supporting design and retrofit decisions through detailed models. However, the ongoing transition toward climate-neutral districts and cities is profoundly changing the role of simulation. Buildings are no longer isolates entities; they act as active nodes in complex energy systems, interacting through shared infrastructures, storage, renewable generation, and increasingly flexibility mechanisms (demand response, sector coupling, aggregation, energy sharing).

This evolution raises new challenges for building simulation, including multi-dimensional, multi-scale consistency, integration of electrical, thermal and cooling domains, coupling physics-based models with optimization, data-driven methods and control, translation of simulation outputs into decision-support tools for planners, operators and policy makers.

In this context, emerging urban configurations, both above-ground and underground, are becoming increasingly relevant to the building simulation community. They represent highly comprehensive energy infrastructure with significant potential for waste heat recovery, pre-cooling, and flexibility provision, and their integration with buildings and district energy systems poses new modelling and decision-support challenges. Simulating such interactions requires extending building performance models to account for spatial coupling, temporal flexibility, and system-level impacts at **both horizonal and vertical urban dimensions.**

This workshop aims to bring together different perspectives, ranging from advanced simulation frameworks, optimization models and real-world validation, urban planning for inclusive and socially just cities, as well as experiences from ongoing projects, to foster the discussion on where building simulation is heading in the next decade.

Proposed Presentations

Time	Topic	Speaker
15min	Bridging the SDG goals with positive energy buildings and districts	Prof. Rosaria Volpe University of Catania, Italy rosaria.volpe@unict.it
2min	Question and discussion	
15min	Underground data centers as urban energy infrastructure	Prof. Xingxing Zhang Dalarna University, Sweden xza@du.se
2min	Question and discussion	
15min	Co-creation methodologies and communities' involvement for building a rating system for PEDs and PEBs - the SDG-BASED project perspective (online)	Dr. Irina Panait Urbasofia, Romania irina.panait@urbasofia.eu
2min	Question and discussion	
15min	Choreographing data - making the technical tangible in participatory energy transition (online)	Dr. Bahanur Nasya Wonderland – Platform for European Architecture, Austria office@wonderland.cx
2min	Question and discussion	

■ Workshop 6: Towards climate-resilient futures: Thermal environments and human adaptation in a warming world

Chair/Co-Chair:
Associate Professor Pengyuan Shen, Tsinghua University, China,
shenpengyuan@sz.tsinghua.edu.cn
Associate Professor Xue Liu, Southwest Jiaotong University, China,
liuxue@swjtu.edu.cn

Location: RM 2306

Secretary: LIN Jinxi

Content of the Workshop

In recent years, global temperatures have repeatedly reached record-breaking levels, with the past three years ranking among the hottest ever observed. This warming trend has been accompanied by a marked increase in the frequency, duration, and intensity of extreme heat events, posing significant risks to urban environments and human health. Such conditions are associated with rising heat-related morbidity and mortality, especially among vulnerable populations in high-density cities. Therefore, there is an urgent need to integrate urban thermal environments and human responses to better assess and enhance thermal resilience in urban environments.

This workshop aims to address the growing challenges of understanding and enhancing thermal resilience in the context of a warming climate. The main objectives include: 1) development and application of future weather datasets to better characterize climate change; 2) investigating the impacts of climate and heat extremes on urban thermal environments; 3) understanding human responses to thermal environments. This workshop emphasizes an integrated understanding of thermal environments and human thermal perception, and their interactions across scales in a warming climate.

Proposed Presentations

Time	Topic	Speaker
20 min	Feeling the Heat: Modeling Outdoor Thermal Perception and Its Health Implications	Prof Yongxin Xie Hong Kong Polytechnic University, China yong-xin.xie@polyu.edu.hk
5 min	Question and discussion	
20 min	Future and Representative Weather Datasets Development for North America	Prof Zhaoyun Zeng University of Macau, China Zyzeng@um.edu.mo
5 min	Question and discussion	
20 min	Thermal Resilience of Different Urban Forms Under Compound Temperature-humidity Extremes: An Observational Study in High-Density Humid Subtropical Twin Cities	Prof Yueer He Shenzhen University, China heyueer@szu.edu.cn
5 min	Question and discussion	
20 min	Tracking the Thermal Pulse: Psycho-Physiological Sensing of Environmental Variability in a Warming World	Prof Yuchen Ji Shenzhen University, China jiyuchen@szu.edu.cn
5 min	Question and discussion	

Social Activities

Opening Ceremony

The opening ceremony will be held on Thursday, June 11th, from 9:00 to 9:20 (GMT +8), in Room LT-A, Academic Building, HKUST. Welcome speech, opening address, and a group photo of all the participants are included.

Banquet

The banquet will begin at 17:00 (GMT+8) on Friday, June 12th, in The Clearwater Bay Golf & Country Club. Happy Hour, Banquet, and Best Paper Awarding Ceremony are included. Ticket is required.

Award Ceremony

The Award Ceremony will be held on Saturday, June 13th, from 11:20 to 11:35 (GMT+8) in Room LT-A, Academic Building, HKUST. “Best Oral” and “Most Popular Poster” award are included.

Avenue of Star, TST

You can visit the Avenue of Stars in Tsim Sha Tsui on the evening of Thursday, June 11th, based on your own arrangement. The Avenue of Stars offers a beautiful night view of Victoria Harbour and the Hong Kong skyline.

■ Peak Tram

You can also take the Peak Tram to Victoria Peak on the evening of Thursday, June 11th. The Peak, Hong Kong's most popular attraction is more than just stunning vistas or great shopping and dining. It's an amazing collection of unique must-visit attractions, providing you with a diverse fun-filled experience of Hong Kong's living culture.

Getting to the Peak by the Peak Tram is an unforgettable experience. One of the world's oldest and most famous funicular railways, the tram rises to 396 metres (about 1,300 feet) above sea level. It is so steep that the buildings you pass look like they are leaning a gradient of between 4 to 25.7 degrees! Whether you are going up or coming down, you will love this trip.

You are advised to check the tram schedule and ticket information in advance (https://www.thepeak.com.hk/en/ticket-and-booking/purchase-ticket/peak-tram-sky-pass).

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