

Resilient City: Physical, Social, and Economic Perspectives

Virtual Session | May 23, 2022

ARCC-EAAE 2022_ Virtual Session Schedule

11:00am-6:00pm EDT Monday, May 23, 2022

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<i>Time (EDT)</i>	<i>Virtual Room</i>	<i>Event/Session</i>
11:00am-11:15am	XXXX	WELCOME (BACK) + OPENING REMARKS Chris Jarrett, <i>President, Architectural Research Centers Consortium (ARCC)</i> Oya Atalay, <i>President, European Association for Architectural Education (EAAE)</i> Marilys Nepomechie and Shahin Vassigh, <i>Co-Chairs, ARCC-EAAE 2022</i>
11:15am-11:30am	XXXX	Break / Transition
11:30am-12:30pm	XXXX	ARCC-CIB WORKSHOP_ Spatial Equity and Inclusiveness in Research and Practice Moderator: Ihab Elzeyadi, <i>University of Oregon</i> Bob Giddings, <i>Northumbria University</i> Silvio Melhado, <i>University of Sao Paulo / Ecole de Technologie Superieure, Montreal</i> Jennifer Barrett, <i>University of Central Lancashire</i> This workshop will address the multiplicity of methods to harness equity and inclusion in design pedagogies, research, and innovation, carried out across our disciplines and professions, and to empower us to educate a new generation of built environment designers to meet the strategic imperatives of this historical moment.
12:30pm-12:45pm	XXXX	Break / Transition
12:45pm-2:15pm	XXXX	RESILIENT HOUSING, AFFORDABILITY AND HOUSING INSECURITY Moderator: Christina Bollo, <i>University of Illinois at Urbana Champaign</i> Geohome: Affordable, Resilient Housing Prototype George Elvin, <i>North Carolina State University</i> Approaches to Affordable Housing Design Using VAE and Space Syntax: Case Studies from Los Angeles Junyoung Myung, <i>University of Illinois at Urbana-Champaign</i> Jung Yun Choi, <i>Seoul National University</i> Taegyu Lee, <i>Seoul National University</i> Housing Insecurity and Latinx Community Resilience in Small Towns in Mississippi Silvinia Lopez Barrera, <i>Mississippi State University</i> Diego Thompson, <i>Mississippi State University</i>
12:45pm-2:15pm	XXXX	CARTOGRAPHY, CLIMATE AND CROSS-CULTURAL CONSIDERATIONS Moderator: Ilaria Valente, <i>Politecnico di Milano</i> Metropolitan Cartography: An Inventive Practice Tool for Caring Metropolitan Landscapes Antonella Contin, <i>Politecnico di Milano</i> Valentina Galiulo, <i>Politecnico di Milano and Universidad de Sevilla</i> Domingo Sánchez Fuentes, <i>Universidad de Sevilla</i> Nature Based Solutions and Circular Economy: Structuring a Long-Term Project for a Climate Resilient Design Kevin Santus, <i>Politecnico di Milano</i> Critical Explorations of Architecture Education in a Rapidly Changing World: Cross-Cultural Considerations of the Double-Edged Sword of Professional Competency and Global Citizenship Brian R. Sinclair, <i>University of Calgary</i> Raffaello Furlan, <i>Qatar University</i>

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12:45pm-2:15pm XXXX
TECHNOLOGY_
Digital Design + Practices

SPATIAL PERFORMANCE, ANALYSIS AND MODELING**Moderator:** Ming Hu, *University of Maryland***Evaluation of Spatial Performance in Vertically Integrated Developments Using a Network Science-Based Approach**Srilalitha Gopalakrishnan, *Singapore University of Technology and Design*Chirag Hablani, *Singapore University of Technology and Design*Daniel Wong, *Singapore University of Technology and Design*Benny Chin, *Singapore University of Technology and Design*Anjanaa Srikanth, *Singapore University of Technology and Design*Ajaykumar Manivannan, *University of Ottawa*Roland Bouffanais, *University of Ottawa*Thomas Schroepfer, *Singapore University of Technology and Design***Visual Data-Based Spatial Analysis of Built Environments**Chirag Hablani, *Singapore University of Technology and Design*Daniel Wong, *Singapore University of Technology and Design*Thomas Schroepfer, *Singapore University of Technology and Design***Thermoelectric Facades: Modeling Procedure and Comparative Analysis of Energy Performance in Various Climate Conditions**Ajla Aksamija, *University of Utah*Mahsa Faid Mohajer, *University of Massachusetts Amherst*

12:45pm-2:15pm XXXX

POSTER/PROJECT SESSION A**Moderator:** Oya Atalay Franck, *Zurich University of Applied Sciences***Assessing Architectural Design Factors of Maternity Ward that Influence Quality of Health Care and Patient Outcomes at Queen Elizabeth Central Hospital in Blantyre, Malawi**

Chris Harnish, Luis Gadama, Zayithwa Fabiano, Meghan Gannon, Kayla Holston,

Stephanie Catrambone, *Thomas Jefferson University***The Scalability of Urban Agriculture: Chicago Case Studies**Kristin Jones, *Illinois Institute of Technology***Design for Youth: Research in the Design Studio School of Architecture**Julia W. Robinson, *University of Minnesota***The Future of Food Production: Urban Farming Towards Food Self-Sufficiency**Camilo Cerro, *American University of Sharjah***The strange Sources of Brazil's Modern Architecture: The Neocolonial Style in the Centennial Exposition (1922)**Camila Miranda Feltrin and Maria Teresa Dias da Fonseca, *Faculdade de Arquitectura da Universidade do Porto***Rights, Sagacity + The Devil's Crop: Provocations in an Ethos of Design, Dissolution + Disarray**Brian R. Sinclair, *University of Calgary*

2:15pm-2:30pm XXXX

Break / Transition

2:30pm-4:00pm XXXX
CLIMATE_
Mitigation + Adaptation

CITIES AND RESILIENCE: STRATEGIES AND EVALUATION**Moderator:** Dag Boutsen, *Katholieke Universiteit Leuven***Mapping and Active Borders as Instruments for Climate-Resilient Waterfront Design Strategies**Elena Verzella, *University of Ferrara***Understanding Efficient Mitigation Strategies for Los Angeles' Heat Islands Using OLS Regression Analysis**Olivia Vander Poel Lewis, Pablo La Roche, Joey-Michelle Hutchison, Arianne Ponce, *Callison RTKL*

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Evaluating the Circadian-Effectiveness of Light through Personal Light Exposure Measurement: An Initial Test Using a Low-Cost and Wearable Spectrometer in Home-Office

Armin Amirazar, *University of North Carolina at Charlotte*
 Mona Azarbayjani, *University of North Carolina at Charlotte*
 Maziyar Molavi, *University of North Carolina at Charlotte*

2:30pm-4:00pm XXXX

PUBLIC HEALTH_
 Human-Centered Design

HEALTH, LIGHTING AND HUMAN PERCEPTIONModerator: Saif Haq, *Texas Tech University***Exploring the Impacts of Human-Centric Lighting Spatial Patterns on Elderly Residents Mood and Preference – An Architectural Content Analysis**

Nasrin Golshany, *University of Oregon*
 Ihab Elzeyadi, *University of Oregon*

Exploring the Role of Human Perception: A Comparative Analysis of Human Thermal Comfort and Urban Design Parameters

Naveed Mazhar, *Northern Alberta Institute of Technology*
 Enrica Dall'Ara, *University of Calgary*
 Brian R. Sinclair, *University of Calgary*

Exploring the Walkability in a Hospital-Anchored Neighborhood: A Case Study of Emory University Hospital Midtown Campus

Xiaowei Li, *Clemson University*
 Dina Battisto, *Clemson University*

2:30pm-4:00pm XXXX

CLIMATE_
 Frameworks for Interconnectivity

URBAN MAPPING: FRAMEWORKS AND TOOLSModerator: Adil Sharag-Eldin, *Kent State University***Mapping Blindspots in Urban Atmospheric Pollution Assessment in the US-Mexico Borderland**Stephen Mueller, *Texas Tech University***Connect or Adapt: Analytic Framework for the Planning and Design of Resilient Spatial Networks**

Daniel Kin Heng Wong, *Singapore University of Technology and Design*
 Wei Chien Benny Chin, *Singapore University of Technology and Design*
 Roland Bouffanais, *University of Ottawa*
 Thomas Schroepfer, *Singapore University of Technology and Design*

MODE_Bios: A Bioclimatic, Adaptive, Urban Design Tool

Polyxeni Mantzou, *Democritus University of Thrace*
 Anastasios Floros, *Democritus University of Thrace*

2:30pm-4:00pm XXXX

TECHNOLOGY_
 Materials + Fabrication

PEDAGOGICAL TOOLS AND DESIGNING FOR CHANGEModerator: Valerian Miranda, *Texas A&M University***Building with Air: The Internet of Things (IoT) as a Pedagogical Tool for Design-Build Education**Nate Shigeo Imai, *Texas Tech University***Low-cost Acoustic Panels with Origami Patterns for Classrooms**

Julio C. Diarte, *Pennsylvania State University and Universidad Nacional de Asuncion*
 Elena M. Vazquez, *Pennsylvania State University*

Design for Change: Climate Centered Pedagogy in the Architecture StudioGabriel Kaprielian, *Temple University*

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POSTER/PROJECT SESSION B**Moderator:** Tadeja Zupančič, *University of Ljubljana***Considering Health + Wellness Beyond Convention: Spirituality, Space and the Critical Case of Sufism**Nooshin Esmaeili, Brian R. Sinclair, *University of Calgary***Gestural Modeling to Recapture the Human Body in Design**Sara Codarin, Karl Daubmann, *Lawrence Technological University***Building in the Digital Transformation: Translations from Design to Technological-enabled Demountable Building.**Sara Codarin, Karl Daubmann, Emily Kutil, Kristen Dean, *Lawrence Technological University***Urban Design Mitigations: Considering COVID-19's Impact on Public Space**Deirdre Hennebury, Fernando Cirino, *University of Michigan***Indigeneity, Imagination, Equity + Design: Ethical Space and Complementary Ways of Knowing**Brian R. Sinclair, *University of Calgary***Complexity Science-based Analysis of Sustainable Integrated Urban Districts**Anjanaa Devi Srikanth, Chirag Hablani, Benny Chin, Thomas Schroepfer
Singapore University of Technology and Design

4:00pm-4:15pm XXXX

Break / Transition

4:15pm-5:45pm XXXX

EQUITY_

Inclusive Urban Landscapes

RESILIENCE, SOCIAL EQUITY AND ACCESS**Moderator:** Alexandra Staub, *Pennsylvania State University***Neighborhood Design with Community Engagement**Julia Robinson, *University of Minnesota (Architecture)*Brandon Champeau, *United Properties*Jamil Ford, *Mobilize Design & Architecture*Timothy Griffin, *University of Minnesota (Minnesota Design Center)*Cathy Spann, *Jordan Area Community Council***The Role of Architecture in Addressing Social Equity in Response to Covid-19**Ebtehal Bahnasy, *University of Minnesota***Trends and Correlates of Neighborhood Park Access in Philadelphia**Tiara Halstead, *Thomas Jefferson University*Russell McIntire, *Thomas Jefferson University*

4:15pm-5:45pm XXXX

PUBLIC HEALTH_

Public Space

ROLE OF HOUSING IN COMMUNITY RESILIENCE**Moderator:** Joao Pedro Xavier, *University of Porto***Through the Eyes of The Public: The Promotion of Social Rental Housing (SRH) as a Focal Point in Addressing Housing Resilience**Chika Chioma Daniels-Akunekwe, *University of Calgary*Brian R. Sinclair, *University of Calgary and sinclairstudio, inc.***The Public Restroom as a Site of Cultural Conflict**Edward Steinfeld, *University at Buffalo, State University of New York*Adam Thibodeaux, *University at Buffalo, State University of New York*Shira Gabriel Klaiman, *University at Buffalo, State University of New York***Adaptive Streets: Increasing Social and Ecological Resilience Along a Cross-city Bicycle Boulevard**Courtney Crosson, *University of Arizona*

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PUBLIC HEALTH_
Human-Centered Design

COMFORT AND HEALTH, RESILIENCE AND ASSESSMENT**Moderator:** Rahman Azari, *Pennsylvania State University*

Integrating Biophilic, Net-Positive, and Resilient Design: A Framework for Architectural Education
Mary Margaret Guzowski, *University of Minnesota*

The Neighborhood Accessibility Framework: A Methodological Instrument to Assess Neighborhood-Level Determinants That Affect the Health of Urban Residents
Hitakshi Sehgal, *University of Minnesota*

Dwellings in the COVID-2019 Pandemic Times: Perspective of Six Female Architecture Students from the Midwest USA
Mania Tahsina Taher, *University of Wisconsin-Milwaukee*

4:15pm-5:45pm XXXX
CLIMATE_
Mitigation + Adaptation

EMERGENT PROCESSES, COMPLEXITY AND GLOBAL WARMING**Moderator:** Claus Peder Pedersen, *Arkitektskolen Aarhus*

Rebellion, Robotics, and a Radical Reboot: Emergent Processes in Turbulent Times
Dustin Couzens, *Modern Office of Design + Architecture*
Brian R. Sinclair, *University of Calgary and sinclairstudio, inc.*
Ben Klumper, *Modern Office of Design + Architecture*

Uncertainty, Complexity + Change: A Cohesive Frame to Advance Agility in the Built Environment
Salah Imam, *University of Calgary and Entuitive Corporation*
Brian R. Sinclair, *University of Calgary and sinclairstudio, inc.*

From Cold War to Global Warming: Dilemma's in Retrofitting the Modernist University Campus in Latin America. Case study: Quito, Ecuador
Victor Hugo Molina, *Technical University of Ambato*

4:15pm-5:45pm XXXX

POSTER/PROJECT SESSION C**Moderator:** Peter Wong, *University of North Carolina at Charlotte*

The Renewal Design of Dong Timber Dwelling Based on Tas Software: The Case Study of Gaobu
Xiaoyun Liu, *Politecnico di Milano*

Amphibian Typologies and The Urban Imaginary
Mona El Khafif, Darcy Engle, *University of Virginia*

Re-Commissioning Land: Spatial and Temporal Urban Strategies for Coastal Territories
Mona El Khafif, Ali Fard, *University of Virginia*

Postcards from the Future: Climate Fiction as Architecture Pedagogy
Gabriel Kaprielian, *Temple University*

Equitable Access to Building Construction Through Advancements in Open and Global Building Machine Technology
Elizabeth Andrzejewski, Marcus Shaffer, Esther Obonyo, *Pennsylvania State University*

RIVERGAN: Fluvial Landforms Generation Based on Physical Simulations and Generative Adversarial Network
Xun Liu, *University of Virginia* and Runjia Tian, *Harvard University*

5:45pm-6:00pm XXXX

CLOSING REMARKS

Chris Jarrett, *President, Architectural Research Centers Consortium (ARCC)*
Claus Peder Pedersen, *Arkitektskolen Aarhus, EAAE-ARCC 2024*

Best Paper and Best Poster Awards
Ming Hu, *Awards Chair, University of Maryland*