

# “Beating the Heat” 2023 – Conference Program

Time	Item	Room
08:30-09:15	<b>Door opening, Reception</b>	HG EO Süd
09:15-09:30	<b>Welcome speech</b> Organizational Committee	HG E 5
09:30-10:00	<b>Keynote 1</b> - Research Prof. Mathias Roth (NUS Singapore) «Measurements for urban climate models: examples from Singapore»	HG E 5
10:00-10:30	<b>Keynote 2</b> Government Gregory Grämiger – ARE-Kanton Zürich «Climate-adaptive settlement development: The revision of planning and building regulations in the canton of Zurich»	HG E 5
10:30-11:45	<b>Coffee break</b> and <b>poster pitches</b>	HG EO Süd
11:45-12:15	<b>Parallel Session 1 (see below)</b> Planning & Modelling	HG E 5 / 33.1 / 33.3
12:15-13:15	<b>Lunch break</b>	individual
13:15-14:15	<b>Parallel Session 2 (see below)</b> Application & Monitoring	HG E 5 / 33.1 / 33.3
14:15-15:30	<b>Coffee break</b> and <b>poster pitches</b>	HG EO Süd
15:30-16:00	<b>Keynote 3</b> Health Martina Ragettli – SwissTPH, Basel «How to beat the heat from a public health perspective»	HG E 5
16:00-16:30	<b>Keynote 4</b> Applied Research Jan Remund – Meteotest, Bern «Modelling high and low resolution heat maps with Palm-4U»	HG E 5
16:30-16:45	<b>Closing Session</b> incl. best contribution award	HG E 5

Institutional partners:



Supporters:



**Parallel Sessions:**

Talks: 12' Presentation + 3' Discussion

**Parallel Session 1 Planning & Modelling**

<b>Landscape &amp; Architecture: Room HG E 33.1</b>		
<b>Chair: Andreas Rubin</b>		
<b>Time</b>	<b>Author</b>	<b>Topic</b>
11:45 – 12:00	Aytac Kubilay, ETH Zurich	Assessment of outdoor thermal comfort in cities densified with high-rise buildings and the impact of urban trees
12:00 – 12:15	Prof. Silvia Benedito, Harvard University/Uniola GmbH	Thermal Thresholds for Heat Adaptation: Spaces of disciplinary convergence between landscape and architecture
<b>Health: Room HG E 33.3</b>		
<b>Chair: Dominik Strebel</b>		
<b>Time</b>	<b>Author</b>	<b>Topic</b>
11:45 – 12:00	Samuel Lüthi, ETH Zurich	Changes in heat-mortality over time: Are countries adapting to heat fast enough?
12:00 – 12:15	Martin Schlaepfer, University of Geneva	An improved method for identifying thermal discomfort in cities using remote sensing

**Parallel Session 2 Application & Monitoring**

<b>Application: Room HG E 33.1</b>		
<b>Chair: Dominik Strebel</b>		
<b>Time</b>	<b>Author</b>	<b>Topic</b>
13:15 – 13:30	Judith Geib, Technische Universität Kaiserslautern-Landau	Use of leaf-turning tree species as a possible adaptation strategy to changing climatic conditions in urban areas
13:30 – 13:45	Margarita Skoryi, DWD German Meteorological Service	Creating the UHI-MAP climate service for Germany with the help of European Copernicus data
13:45 – 14:00	Simon Eggimann, urbanista.ch	Introduction of a binding requirement for landowners for a minimum area to be crowned with trees in the zoning regulations of the municipality of Allschwil BL
14:00 – 14:15	Shailesh Shrestha, Str.ucture GmbH	Enhancing Sustainable Urban Planning through Microclimate Simulation and Workflow Automation in the PALM Model System: A Comprehensive Case Study of Konstanz, German
<b>Architecture: Room HG E 33.3</b>		
<b>Chair: Andreas Rubin</b>		
<b>Time</b>	<b>Author</b>	<b>Topic</b>
13:15 – 13:30	Pierre Estève-Bourrel, Eth Zurich	Can earth buildings contribute to minimising operational and embodied carbon in future climates? Sensitivity analysis of a parametric model
13:30 – 13:45	Julian Raffetseder, USI - Academy of Architecture	Designing urban form and solar access: A geometry-based solar control strategy for the climate adaptation of cities.

**Poster Sessions**

<b>Modelling: HG EO South</b>	
<b>Author</b>	<b>Topic</b>
Alexandra Reiß meteoblue AG	“Basel Living Lab”: First insights in some results from a dense measurement network in Basel, Switzerland.”
Guo-Shiuan Lin, EPFL Lausanne	An economic assessment of temperature-related mortality associated with urban heat islands in Europe
Jacopo Canton ETH Zürich	Climatological analysis of the effects of Swiss cities on the country's weather
Yuxin Yin Eawag	Evaluating the impact of vegetation on microclimate performance for various urban green spaces in Switzerland
Fabiana Chiriatti, ETH Zurich	High resolution climate projections for heatwaves in complex topography
Sebastian Schlögl, Meteoblue AG	High-resolution air temperature forecast and location-specific heatwave alertings in cities
Philipp Urech ETH Zürich	Modeling-simulation loop for landscape design
Yan Zhang Zhejiang University	Numerical simulation and water-tank studies of urban wind-thermal environment
Ivo Suter Zurich University of Applied Sciences	Simulating the micro-climate of Zürich and its features
Lucas Gobatti Eawag	Street to city-scale Blue-Green Systems planning for heat vulnerability mitigation
Jixuan Chen Eawag	Too hot to handle? Fast modelling of urban heat to support the spatial planning of liveable cities
Yongling Zhao ETH Zurich	Using a machine learning model to quantify cooling benefit of vegetation in urban heat mitigation

<b>Monitoring: HG EO South</b>	
<b>Author</b>	<b>Topic</b>
Setareh Amini University of Berne	A Spatial Analysis Approach for Assessing Temperature Variations in European Urban Areas
Flora Li University of Cambridge	Addressing Climate Change Impacts and Vector-Borne Diseases through Architectural Design: A Case Study in Kenya
Coral Salvador, University of Berne	How droughts of varying duration affect mortality in South Africa
Tess Figols University of Geneva	Quantification of urban heat stress reduction by different types of shading
Adrienne Wehrli University of Berne	The Impact of the Urban Heat Island Effect on Mortality Data in the City of Bern

<b>Implementation &amp; Planning: HG EO South</b>	
<b>Author</b>	<b>Topic</b>
Monica Sciarini Nephos Swiss Fog	Evaporative cooling as a tool for heat wave mitigation and urban requalification. Turbinenplatz in Zurich and Piazza del Sole in Bellinzona: two applications of Nephos high-pressure water mist-system
Daniele Santucci Climateflux GmbH / Rwth Aachen University	Hyperlocal Dynamic Sensing for Heat Stress Mitigation
Gregor Feigel, Albert-Ludwigs-University Freiburg	One year data of a customisable real-time weather monitoring system at street level, with public outreach in Freiburg, Germany

