

Making Future Cities calls for understanding and evaluating the contemporary urban system, its recent history, its present dynamics, and its possibilities. The urban system is a global phenomenon, interconnecting an enormous variety of different cities and settlements of all sizes. It comprises the metropolis as well as the village.

The discussion about urban systems is based on well-acknowledged facts: cities accommodate more people today than at any point in history; they are more interconnected than ever before; they are the sites of some of the most intractable contemporary social, political and economic dilemmas; and they are substantial consumers of energy and producers of green house gases. To this consensus we add the importance of considering the anonymous multitude of small and medium sized cities where the majority of our planet's urban population lives, as well as the ability of cities to delight and provide care.

The urban system is a global phenomenon, and many parts of the system are highly interconnected. The problem is that the actual urban system is not sustainable. As global sustainability is our goal, we have to put the cities and their hinterlands at the centre of our endeavours.

Since the UN-Habitat Conference 1992 in Rio the principles of sustainable urban development are outlined in the report of the World Commission on Environment and Development, the Global Agenda 21, and the United Nations Millennium Goals. Achieving these ambitious goals involves innovation, research and commitment to practical outcomes.

The Singapore Centre of ETH Zurich on Sustainable Global Development [SEC] and its Future Cities Laboratory [FCL] is committed to addressing these aims in an interdisciplinary setting. We ask: what are the means by which urban systems and their cities might be designed, produced, managed, maintained, recycled and, not least, be inhabited in a way that supports the aims of global sustainability?

This first FCL conference addresses this ambitious question by considering the theme of 'Making Future Cities'. By applying the term 'making' we hope to activate some of the contingencies, messiness, and provisional results of a work in progress at an early stage of research.

The conference aims to situate these wider reflections in Singapore and its regional hinterland. In addition, the conference is intended as a public platform for the researchers, so they can implement and shape the research setting by contributing themselves to the guiding research questions. It will showcase some of the research that has been initiated at the Future Cities Laboratory in its inaugural year. Finally, it wants to be a forum for discussion on emergent themes.

The conference will feature a range of papers, posters and discussions on the following themes:

- Urban design strategies
- Transport and mobility planning
- Zero emissions building technology
- Urban data and modeling
- Political economy of territory

The conference will conclude with a round table forum featuring renowned academics and architects from Singapore.

FUTURE CITIES LABORATORY

MAKING

1ST INTERNATIONAL CONFERENCE

FUTURE

12-14 SEPTEMBER 2011

CITIES

SEC – SINGAPORE-ETH CENTRE FOR GLOBAL ENVIRONMENTAL SUSTAINABILITY

NANYANG TECHNOLOGICAL UNIVERSITY

Research Techno Plaza

50 Nanyang Drive, SINGAPORE 637553

On behalf of FCL:

Franz OSWALD, Professor Emeritus,
FCL Program Leader Singapore

Stephen CAIRNS, Professor,
FCL Scientific Coordinator



MONDAY, 12 SEPTEMBER 2011

- 09:00 **WELCOME**
Professor Gerhard SCHMITT, Director SEC
-
- 09:15 **INTRODUCTION**
by Host of the Day, Professor Kees CHRISTIAANSE
-
- 09:30 **CATALYSTS OF URBAN POTENTIALS: CASES IN SINGAPORE AND EAST ASIA**
Introduction by Professor Kees CHRISTIAANSE
- Ting CHEN /Ying ZHOU: Cultural Productions and Elements of Urban Potentials: the Singapore Case
- Ting Chen: Creativity as Catalyst: the Shenzhen and Hong Kong Cases
- Ying ZHOU: Cultural Capital, Spatial Productions, Pragmatist Landscapes: the Shanghai Case
- Anna GASCO: Production of space driven by airports: a comparative study of Singapore and Brussels
- Max HIRSH: Transborder Infrastructure: "Upstream" Air Travel in the Pearl River Delta
-
- 11:30 **BREAK**
-
- 12:00 **ON, ON, ON – THE POLITICS OF EXCESS**
Lecture by Assistant Professor Alex LEHNERER
-
- 12:30 **PLENARY 1**
-
- 13:00 **LUNCH + MODULE III POSTER**
-
- 14:00 **SINGAPORE'S DAILY FLOW: (M)EDIUM AND (L)ONG TERM**
Introduction by Dr. Alex ERATH
- Dr. Alex ERATH: Urban Sustainability and Transport: Research Framework for (M)edium and (L)ong term
- Sergio ORDONEZ: Modeling transport supply for MATSim
- Artem CHAKIROV: Applications of data mining in transport research – the case of Singapore
- Pieter FOURIE: Comparison of remembered and recorded public transport trip-making behaviour
- Michael VAN EGGERMOND: A spatial hedonic regression model for housing prices in Singapore
-
- 16:00 **PLENARY 2**
-
- 16:15 **BREAK**
-
- 17:00 **SITOPIA – ADDRESSING THE URBAN PARADOX**
Keynote by Carolyn STEEL
-
- 19:30 **OPENING DINNER** at Swiss Club
by invitation only – individual transfer

TUESDAY, 13 SEPTEMBER 2011

- 09:15 **INTRODUCTION**
by Host of the Day, Professor Stephen CAIRNS
-
- 09:30 **ZERO EMISSION SINGAPORE: NEW METHODS AND TECHNOLOGIES FOR BUILDING OPERATION**
Introduction by Dr. Forrest MEGGERS
- Dr. Forrest MEGGERS: Introducing LowEx and a new path toward zero emissions
- Professor Mo LI [NTU]: Integrated environment sensing
- Professor Arno SCHLUETER: Integrating LowEx Building Technologies from Design to Operation
- Dr. Luca BALDINI: A novel approach to building ventilation using decentralized equipment
- Professor THAM Kwok Wai / Dr. Jovan PANTELIC [NUS]: Towards Zero Carbon Emissions for Buildings in the Tropics
-
- 11:30 **BREAK**
-
- 12:00 **ARCHITECTURE COWBOYS – SETTING BOUNDARIES**
Lecture by Assistant Professor Dirk HEBEL
-
- 12:30 **PLENARY 1**
-
- 13:00 **LUNCH**
-
- 14:00 **COMPARATIVE GLOBAL URBANIZATION**
Presentation by Professor Christian SCHMID
-
- 14:15 **IDEAL FUTURE CITIES SIMULATION**
Introduction by Professor Gerhard SCHMITT
- Dr. Tao WANG: Extracting complete drainage networks from gridded Digital Elevation Models
- Gideon ASCHWANDEN: How to improve Pedestrian Movement in Singapore – an Agent-based Approach
- Dongyoun SHIN: Applying mobile crowdsourcing for transportation mode and activity detection
- Chen ZHONG: Information visualization of urban material flows – an investigation of food material flow
-
- 16:00 **PLENARY 2**
-
- 16:15 **WORKSHOP**
MAKING RESEARCH SCENARIOS
Moderation by Professor Stephen CAIRNS
-
- 18:15 **REFRESHMENTS** sponsored by swissnex

WEDNESDAY, 14 SEPTEMBER 2011

- 09:15 **INTRODUCTION**
by Host of the Day, Professor Franz OSWALD
-
- 09:30 **ON THE POLITICAL ECONOMY OF TERRITORY**
Introduction by Dr. Jesse LECAVALIER
- Rainer HEHL: Complementarity and Opposition – Urban Informality in Rio de Janeiro
- Benjamin LECLAIR-PAQUET: West Bank Lab: military urbanism & counteractive architecture in contested spaces
- Martha KOLOKOTRONI: Rebalancing Dharavi in Mumbai's global vision
- Sascha DELZ: Implementing, performing, assessing: Addis Ababa's urban fabric under pressure
- Dr. Jesse LECAVALIER: All those Numbers: Logistics, Territory, and Walmart
-
- 11:30 **BREAK**
-
- 12:00 **CITY AND TERRITORY**
Lecture by Assistant Professor Milica TOPALOVIC
-
- 12:30 **PLENARY 1**
-
- 13:00 **LUNCH + WORKSHOP REVIEW**
MAKING RESEARCH SCENARIOS
Moderation by Professor Stephen CAIRNS
-
- 14:15 **PERSPECTIVES OF RESILIENT CITIES**
Keynote by Professor Dieter LÄPPLE
-
- 15:30 **ROUNDTABLE FORUM**
Moderation by Professor Franz OSWALD
- Carolyn STEEL [London]
- Professor Dieter LÄPPLE [Hamburg]
- Professor NG Wun Jern [Singapore]
- Professor WONG Yun Chii [Singapore]
- Professor TAY Kheng Soon [Singapore]
- Professor CHUA Beng Huat [Singapore]
-
- 17:00 **BREAK**
-
- 17:30 **FAREWELL**
Professor Bertil ANDERSSON, President NTU
-
- 19:30 **CLOSING DINNER** city tour en route
Lau Pa Sat