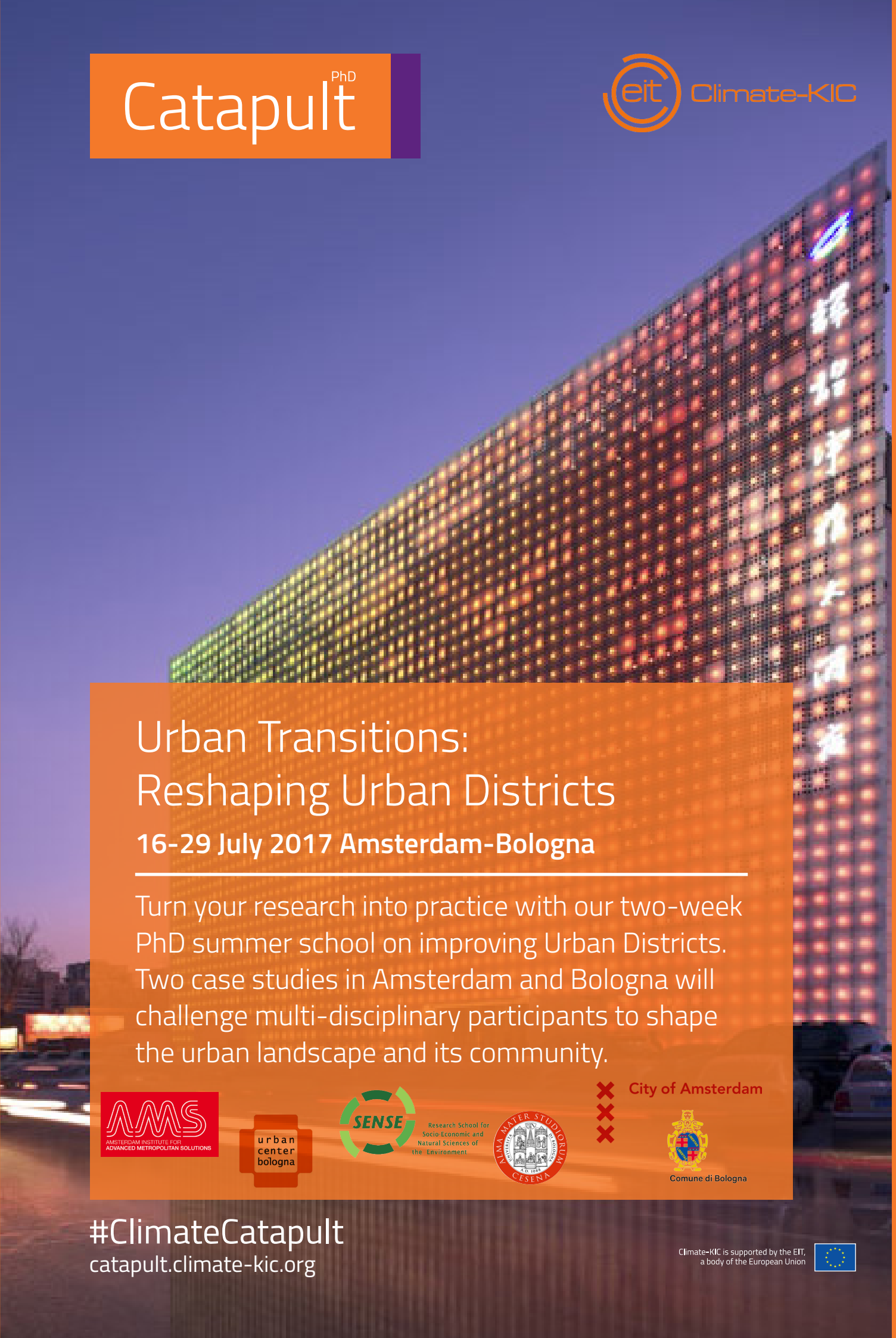
# Catapult PhD

eit Climate-KIC



## Urban Transitions: Reshaping Urban Districts

**16-29 July 2017 Amsterdam-Bologna**

Turn your research into practice with our two-week PhD summer school on improving Urban Districts. Two case studies in Amsterdam and Bologna will challenge multi-disciplinary participants to shape the urban landscape and its community.

AMS Amsterdam Institute for Advanced Metropolitan Solutions

urban center bologna

SENSE Research School for Socio-Economic and Natural Sciences of the Environment

Alma Mater Studiorum Università di Bologna Cesena

City of Amsterdam

Comune di Bologna

#ClimateCatapult

catapult.climate-kic.org

Climate-KIC is supported by the EIT, a body of the European Union

# Case 1:
# Amsterdam Overtoomse veld

In the neighborhood Overtoomse Veld, situated in the West of Amsterdam, housing corporation De Key owns housing complexes that are in the start-up process of retrofitting. They were built in 1958, and they are mostly in their original state. Maintenance has not been done for the past 15 years, so the apartments are in poor shape. There are problems with moisture and mould, and infrastructures for heating and ventilation are out-dated or malfunctioning . The energy label of the houses is low, on average an "E".

The area Amsterdam Nieuw West has a mixed population: about 60% is of non-Dutch origin. The apartments are relatively big (60-80 $m^2$, with up to 5 bedrooms) and the rents are relatively low (400-550 euro on average). They are occupied by bigger families and elderly, many of which of lower income groups of first to third generation migrants. It is expected that part of these residents do not speak Dutch.

The challenge is to develop a strategy for implementation of energy conservation measures like wall insulation, mechanical ventilation and double glazing, to contribute to a better energy label (in this case from E to B) of the building. However, energy performance in terms of energy consumption does not necessarily follow because it depends on future behavior of the residents, therefore an additional challenge is to recruit residents into the retrofitting project. Based on earlier experiences De Key expects resistance towards the project. That is why they want to develop a strategy to involve residents and to ensure their approval so that the project can proceed smoothly.

**"It was a very inspiring experience. I have learned to look at things in a completely different way, and I am expecially happy about the focus on economizing the ideas, because it is not something that comes naturally to me".**

**"I would like to congratulate the program on bringing in such a diverse group of students, challenges and experts!".**

# Case 2:
# Bologna Sant'Orsola District

The Sant'Orsola District is a very specialized site close to the city center of Bologna that hosts the city hospital and key medical facilities according to a consolidated concept of the past where a number of hospital pavilions were aggregated in a wide green area within the city. On the one hand, this makes the site and the services directly accessible from the historic city by the several user categories visiting it every day. On the other hand, its specialized functions limit the use of outdoor spaces and reduce the possibility of integration with the surroundings.

Sant'Orsola district is facing an ambitious renovation process aimed at strongly reducing energy demand and emissions while increasing the quality of services and working/living conditions for both users and staff. The challenges for this case are to define innovative retrofitting methodologies, connect the site and the surroundings providing additional services, develop solutions for considering end users' behavioral implications in the process, define new arrangements for outdoor spaces while considering the business side and feasibility of solutions.

# Programme Catapult
## Preparation: Webinar & Homework

**Monday 26 June**

Webinar: Case presentations, meet & greet participants and coaches
introduction progamme and methodology
introduction homework assignment on education portal

## Week 1 Amsterdam, the Netherlands

**Sunday 16 July**

Arrival & Welcome drinks

**Monday 17 July**

Meet & Greet & Homework presentations

Lecture: Reshaping Urban districts - Frank de Feijter

**Tuesday 18 July**

Visit & Tour Overtoomse veld Amsterdam - Frank de Feijter

Workshops: Cradle to Cradle - Bram van der Grinten

**Wednesday 19 July**

Visit & Tour Onze Lieve Vrouwen Gasthuis Amsterdam

Workshops: Gains & Pains Stakeholders

**Thursday 20 July**

Lecture: Envisioning a sustainable city - Prof. Arjan van Timmeren

Workshop: Problem definition - Willemijn Brouwer

**Friday 21 July**

Workshop Value Proposition Canvas - Bram van der Grinten

Group work & Mid-term presentations

# Week 2 Bologna, Italy

**Saturday 22 July**
Transfer to Bologna

**Sunday 23 July**
Free time

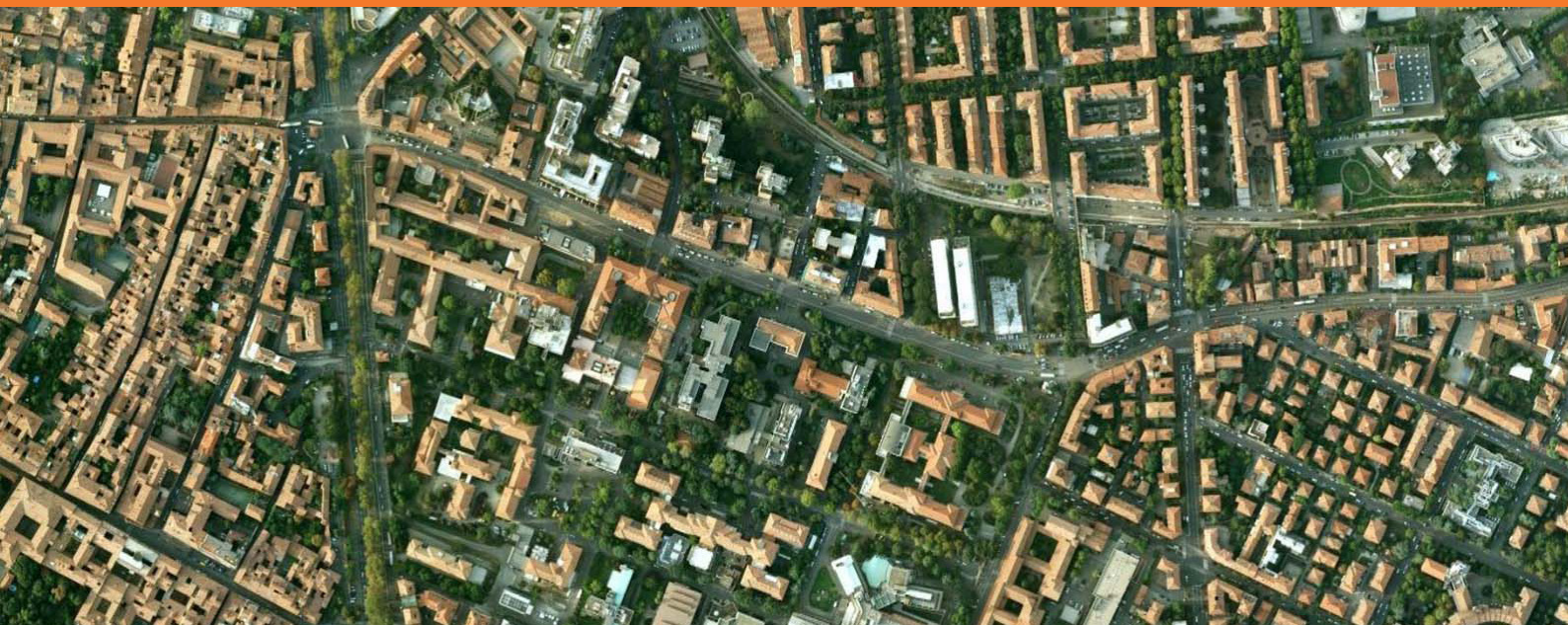
**Monday 24 July**
Wrap up week 1 & Reconnect short term-long term
Visit & Tour Bolognina - Giovanni Fini
Visit & Tour Sant'Orsola District , workshop dialogue stakeholders

**Tuesday 25 July**
Workshops with coaches
Lecture: innovative models for hospitals - Nicoletta Setola
Stakeholder session

**Wednesday 26 July**
Urban center introduction & visit
Lecture: Build interest and Lemon projects lesson learned – Serena Maioli
Workshops: Prototyping & Piloting

**Thursday 27 July**
Workshop: communication (coach/training)
Workshop: project finalization

**Friday 28 July**
Groupwork
Presentation end results: solution and strategic plan to the jury of experts & stakeholders
Final party



# Key Note Speakers

Giovanni Fini is the Environmental Quality Project Coordinator, Environment and energy at the Urban Regeneration department of the Municipality of Bologna.
He strongly contributed in the Bologna Adaptation Plan development and took part to several research project involving the municipality to deliver energy saving measures and innovative solutions. He is also involved in Bologna Smart City project.

Serena Maioli is an Architect and expert in technological and social innovation in the urban planning and construction sector. Since 2016 cooperates with ASTER – innovation and technological transfer platform of Emilia Romagna Region – on two European projects, LEMON and BUILDINTEREST funded under Horizon 2020. She specifically focuses on sustainable architecture and financial models for building renovation.

Nicoletta Setola is Assistant Professor at the Department of Architecture University of Florence and an Architect specialised in healthcare building. She holds a PhD in Architectural Technology and Design and is currently lecturer in Architectural Technology Studio at the School of Architecture, University of Florence. Her work focuses particularly on spatial configuration analysis related to people flows and users' behaviors in buildings; she is an expert in 'Space Syntax' theory and methodology and its use in analysis and design of healthcare spaces.

Bram van der Grinten is Circular Economy product design consultant and Climate-KIC start-up coach. He studied Industrial Design Engineering, master Integrated Product Design, and is specialized in cradle-to-cradle engineering. He is author of the book 'Nature inspired design'. In March 2012, he re-joined his faculty for the NID research programme, a collaboration between TU Delft and major Dutch companies, aiming to develop a method for Nature Inspired Design that works in practice and is scientifically sound.

Professor Arjan van Timmeren is scientific director of the Amsterdam Institute for Advanced Metropolitan Solutions (AMS). He has played a significant role in integrating technologybased metropolitan solutions for sustainable cities, both in practice and in academia. Through his position and his research group at TU Delft, he is involved in many projects within the Netherlands and abroad, ranging from individual buildings to large 'climate neutral' city districts and infrastructure.

# Costs

The PhD Catapult is an integral part of Climate-KIC's PhD programme, which means that fees are fully covered for Climate-KIC labelled students. For partcipants of the SENSE graduate school and Amsterdam Institute for Advanced Metropolitan Solutions the fee is €400,00 euro. For all other participants (PhDs registered at an EU university, Researchers and Professionals) the following fee applies: €800,00 euro

The fee of the programme includes:
- Accommodation (in double rooms). Single rooms are available for an extra charge
- Breakfast and lunch, and approximately two dinners per week
- Local transportation & transfer from the first location to the second location

Participants need to cover the travel costs to and from the destination themselves. After the confirmation of acceptance, you will receive an invoice. Course fees need to be paid three weeks before the start of the programme.

# Registration & Contact

More information and registration on our website at
http://learning.climate-kic.org/courses/phd-catapult.

**Deadline for registration: 22 May**

General contact: martine.vanveelen@climate-kic.org

Italian week contact: Jacopo.gaspari@unibo.it