

ISU - URBAN DIGITAL LAB. TRIPLING SPACE | Next Level Institute for Sustainable Urbanism

Initiative: Momentum - Förderung für Erstberufene

Bewilligung: 24.06.2019

Laufzeit: 5 Jahre

Projekt-Website: www.spacelab-isu.org

The Institute for Sustainable Urbanism (ISU) links architecture, urban design and planning to a multitude of other disciplines within the context of a common ground - sustainable cities and urban regions for all. With the support of Momentum, ISU will expand its progressive research in digital urbanism. With view to transforming and building future cities, the digital realm has an ever more important role to play. In order to explore the digital realm for urban development, ISU will build up a dedicated infrastructure - the ISU SPatial Analytics + Cross-disciplinary Experimentation Lab (ISU SPACE LAB), a state of the art competence center for multidisciplinary urban research. This lab explores the digital realm (data, methods and infrastructures) to transgress the disciplinary limits of architecture, urban design, and planning to focus on a) broadening the possibilities for better participatory planning processes, b) anticipating, streamlining and optimizing the use of resources, including physical space and c) understanding the needs of urban space and infrastructure users better. The goal is to devise holistic methods and strategies for a more sustainable development, and thus to foster the economic, social and environmental well-being of urban agglomerations and communities. Part of the ISU SPACE LAB is the TRIPLING-component, an experimental set-up to couple the investigation of real-world physical spaces, digitally and physically modeled spaces. By means of the ISU SPACE LAB to elevate work to the next level from exploring inherited and "conventional" methods of urban design towards a more explorative and hypothesis-driven research into sustainable urbanism.

Projektbeteiligte

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Open Access-Publikationen

An Overview of Scenario Approaches: A Guide for Urban Design and Planning

Understanding land take in small and medium-sized cities through scenarios of shrinkage and growth using autoregressive models

TOPOI A method for analysing settlement units and their linkages in an urban rural fabric

METAPOLIS. TOPOI. SCENARIOS for urban-rural sustainability in Lower Saxony

Move in the City Ansätze datengetriebener Analyse von Stadträumen und die Umkehr des Assistenz-Gedankens in partizipativer Stadtentwicklung

