

Press release

Kaiserslautern, 30 April, 2021
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„Nexus 20/21 – Relationships Between Architecture and Mathematics“ International Online Conference

From basic investigation through designing and realisation to building operations and urban structures – virtually all architectural processes are imbued by computer-aided methods. Therefore, mathematics provides the fundamentals and becomes the mediator between the disciplines of architectural production and the process of creation.

Nexus 20/21 follows the RCA Conference (Research Culture in Architecture – International Conference on Cross-Disciplinary Collaboration) at fatuk, taken place in 2018 and provides new insights on the known leading question on the impact of the digital, especially into the role of mathematics in architecture.

The conference is a cooperation between fatuk, Kim Williams Books and the Nexus Network Journal, a peer-reviewed journal, addressing the implementation of mathematical principles in architecture, funded by Kim Williams in 1999.

At Nexus 20/21 we expect answers to the questions on the potential of digital design thinking, where mathematics occupies an active position and where mathematical thinking plays a role, especially in the design methodology. Thus, pursuing Marco Carpo in „The Second Digital Turn“ (The MIT Press, August 2017), form-finding through simulation and optimisation can substitute the derivation from mathematical formulas. Those new digital tools are no longer tools for making but for thinking.

Nexus 20/21 has its emphasis in the fields of historic preservation, design theory and form-finding. In addition, detailed questions on building-construction as well as on urban development and architectural education will be issued. During four afternoons researchers from 23 countries, from Sydney and Tokyo to Atlanta and Brasilia, will present their research results on these issues in 53 presentations and put them up for discussion.

The conference will take place as an only online event with live lectures and discussions. Additionally, videos will be provided prior as well as recordings subsequently to the event.

Detailed program and further information at:

<https://nexus2021.architektur.uni-kl.de/program>

Visuals can be found at:

<https://nexus2021.architektur.uni-kl.de/press-release-and-material>

„Nexus 20/21 – Relationships Between Architecture and Mathematics“, funded by DFG - Deutsche Forschungsgemeinschaft (German Research Foundation), presented by RCA – Research Culture in Architecture

Hosts: fatuk – Faculty of Architecture, TU Kaiserslautern und Kim Williams Books

26 –29 July, 2021: fatuk, Faculty of Architecture of the TU Kaiserslautern
Pfaffenbergstraße 95, 67663 Kaiserslautern, Germany
Online Conference

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fatuk, the Faculty of Architecture at TU Kaiserslautern is focusing on its teaching concept of the „good house“ which is linked to the tradition of a structural and material honesty in architecture. With a minimum studying time of five years, our course conforms both with the requirements of the Union Internationale des Architectes (UIA) and the Bologna Convention. Our competence centre for timber construction „Science T-Lab“ offers students outstanding expertise and equipment. But above all, fatuk imparts the understanding of the complexity in the architectural profession. With around 500 students, it is enjoyably small and therefore guarantees a very personal studying atmosphere.

fatuk