

# **OSKAR VON MILLER FORUM**

PRESS RELEASE

**Thinking architecture differently: Integrative computer-based design and construction**

**A lecture by Jan Knippers / Jan Knippers Ingenieure, Stuttgart, on October 28, 2021 at 6:30 pm**

The climate crisis is forcing us to drastically reduce the consumption of fossil resources for building. This requires new lightweight construction methods and alternative building materials that at least partially replace steel and concrete. At the same time, the volume of global construction work must increase significantly in order to provide sufficient living space for the world's growing population. The consistent digitalisation of construction processes is the key that reconciles the opposing goals of saving resources and increasing productivity.

In the lecture, Jan Knippers will show how the fundamental and mutually influencing research of digital planning methods and robotic manufacturing processes enables new approaches for the construction of tomorrow that respond to the challenges of the future.

Jan Knippers studied civil engineering at the TU Berlin and received his doctorate there in 1992. He then worked for several years at the internationally renowned engineering company Schlaich Bergermann und Partner in Stuttgart. From 2001 to 2017 he was a partner in Knippers Helbig Advanced Engineering. His most important projects during this time were the central entrance axis for EXPO 2010 in Shanghai (with SBA Architekten), the Thematic Pavilion for EXPO 2012 in Yeosu, South Korea (with Soma Architekten) and the Nachhallgalerie for the Deutsche Oper Berlin (with HG Merz).

## **Institute of Building Structures and Structural Design (ITKE)**

In 2000, Jan Knippers was appointed head of the of the Institute of Building Structures and Structural Design (ITKE) at the University of Stuttgart, where he established research activities on resource-efficient and long-span load-bearing structures. The focus is on bionics, segmented wooden shells and fibre composite structures. The most important projects from this period are the two pavilions at the Federal Horticultural Show 2019 in Heilbronn, the Urbach Tower for the Remstal Horticultural Show 2019 and Maison Fibre for the 2021 Biennale in Venice (all together with Achim Menges, ICD Uni Stuttgart). In 2018 he founded Jan Knippers Ingenieure at the interface of research, development and practice.

Lecture in German