# **Touching Cellulose**

## [Rethink construction] 13 - 24 September 2021

#### Open Public Lecture Series & Registered Student Workshop

Next generation of wood architecture. Architecture and the building industry are in need of a paradiam shift, due to the arowing awareness of their huge contribution to global climate change and ongoing depletion of mineral resources. In order to counter carbon emissions and sourcing building material sustainably, future design and construction is unthinkable without a massive use of timber. the only structural building material that stores carbon while it grows in our forests! The introduction of mass timber at the end of the 20th century as an alternative to concrete and steel was already a huge innovation for the construction industry. Now it is time for the next generation of wood architecture in which computer aided design and robotic manufacturing go hand in hand with a revival of craftsmanship and wood building culture.

Touching Cellulose is initiated by Gilbert Koskamp and further developed with Anne Beim, Felix Waechter and Pierre Jennen together with Delft University of Technology, the Royal Danish Academy and Technical University of Darmstadt Germany.

\_\_\_Workshop 13-24 Sep 2021

Introduction



This year Touching Cellulose is a two part online series launched on 23 April 2021. These lectures, which are found online on the Touching Cellulose website, include speakers like Fabio Gramazio and Pablo van der Lugt. For the second part, **13-24 September 2021**, we are hosting online seminars that are open to the public until the 22<sup>nd</sup> and a international design workshop for registered students.



Touching Cellulos Website



The aim of the ten day workshop is to **touch** and learn about the building culture of wooden architecture . The first week explores timber design through analytical tools, i.e. 2D and 3D drawing and model-making of preselected case studies. During the second week, a utilitarian wood construction will be developed through the case study analysis and presented in drawings and physical form. Participants will have resources available to them including personalized studio sessions and recorded online lectures. Design will be carried out in international mixed groups and presented as a manifesto of Touching Cellulose.



Properties



Construction



Craftsmanship





Einfaches Bauen (Simple Build)

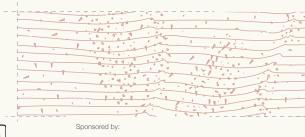
Sustainability

### \_Programme Lineup

13-17 Sep 2021

Week 1

<u>Mon</u>   <u>13</u> <sup>th</sup> _ 0845 - 0930	Opening Lecture & Tools for TREE_TimberREengineered Ing. Arch Gilbert Koskamp - TU Delft, Ssse[OvO, NL
0930 - 1100	Keynote Lecture: Inventive Dedication 'draw it we build it'   No Limits Dipl. Ing. ETH SIA H.Prof Hermann Blumer - FH Aachen, DE - Creation Holz AG, CH
1645 - 1815	Radical [wood] Tectonics   The detail is crucial Prof. Anne Beim - Royal Danish Academy, CINARK, DK
Tues   14 <sup>th</sup>	
0845 - 1015	Rethink Structure   Timber Structuralism Prof. Felix Waechter - TU Darmstadt, Waechter & Waechter Architekten, DE
1645 - 1815	Design Challenges of a Mass Timber Office Building   T3 Bayside Toronto Elizabeth Nichols MSc - New York, US
Wed   $15^{th}$	Elizabeth Nichols MSC - New York, US
0845 - 0930	Circular Social   Wood anchored - LCV Lifecycle value Ir: Oscar Vos - krtt Amsterdam, NL
0930 - 1015	City Wood Pavilion   Insights in assembly of wet sawn wood Ir. Florian Eckardt - architectinamsterdam, NL
1645 - 1815	Future Tree   Complex Timber Structures and Digital Concrete Dr. Aleksandra Anna Apolinarska - Gramazio Kohler Research, ETH, CH
Thurs   16 <sup>th</sup>	
0845 - 1015	Craft and Timber   Friluftsbygning (Outdoor Building), Silkeborg Simeon Østerlund Bamford cand.arch. MAA - ReVaerk Arkitektur, DK
1645 - 1815	Didactic Architecture   Furbished by construction
Fri   17 <sup>th</sup>	Ir. Mechthild Stuhlmacher - Korteknie Stuhlmacher Architecten, BE, NL
0845 - 1015	Prototyping with PAPER   Constructed by Cellulose Prof. Ulrich Knaack - TU Darmstadt, DE
1645 - 1815	BAUBOTANIK   Build with Tree and Time
	Prof. Dr. Ferdinand Ludwig - TU Munich, DE
Mon   20 <sup>th</sup>	
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	Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood   Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, Ssse OvO, NL Intelligent Fabrication with Timber   Resolution of Tectonics
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Past Lectures

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