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 22nd 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)

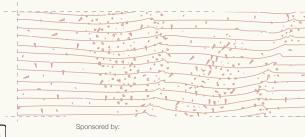
Sustainability

_Programme Lineup

13-17 Sep 2021

Week 1

<u>Mon</u> <u>13</u> th _ 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 th	
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 th	
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 th	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 th	
<u>Mon 20th</u> 0845 - 0945	
	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
0845 - 0945 1645 - 1815 Tues 21 st	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 Prof. Achim Menges - TU Stuttgart, DE
0845 - 0945 1645 - 1815	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
0845 - 0945 1645 - 1815 Tues 21 st	Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SssejOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products
0845 - 0945 1645 - 1815 $Tues 21^{st}$ 0845 - 0930	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 Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Deft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber
0845 - 0945 1645 - 1815 <u>Tues</u> [21 st] 0845 - 0930 0930 - 1015	 Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SsselOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Delft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE
0845 - 0945 1645 - 1815 <u>Tues</u> 21^{st} 0845 - 0930 0930 - 1015 1645 - 1815	Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SsselOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Delft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE Case Study Landwirtschaftliches Zentrum
0845 - 0945 1645 - 1815 <u>Tues</u> [21 st] 0845 - 0930 0930 - 1015 1645 - 1815 <u>Wed</u> [22 nd]	 Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SsselOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Delft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE
0845 - 0945 1645 - 1815 <u>Tues</u> [21 st] 0845 - 0930 0930 - 1015 1645 - 1815 <u>Wed</u> [22 nd]	 Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Deft, Ssse[OvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Deft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE Case Study Landwirtschaftliches Zentrum (Agricultural Center), Salez CH
0845 - 0945 $1645 - 1815$ $Tues [21st]$ $0845 - 0930$ $0930 - 1015$ $1645 - 1815$ $Wed [22nd]$ $0845 - 1015$	 Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SsselOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Delft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE Case Study Landwirtschaftliches Zentrum (Agricultural Center), Salez CH Andy Senn, Architekt BSA SIA - AndySenn Office, CH
0845 - 0945 1645 - 1815 <u>Tues</u> 21^{st} 0845 - 0930 0930 - 1015 1645 - 1815 <u>Wed</u> 22^{nd} 0845 - 1015 1645 - 1815	Prof. Dr. Ferdinand Ludwig - TU Munich, DE Made almost entirely of wood Re-use meets craftsmanship Ir. Pierre Jennen MSc - TU Delft, SsselOvO, NL Intelligent Fabrication with Timber Resolution of Tectonics Prof. Achim Menges - TU Stuttgart, DE Regional regenerative building materials Building methods and products Bouwtuin - TU Delft, NL ONE TOOL for a complete building Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krouwel, NL Building Culture of Simplification Insight in Deciduous Timber Dipl. Ing. Anne Niemann - TU Munich, DE Case Study Landwirtschaftliches Zentrum (Agricultural Center), Salez CH Andy Senn, Architekt BSA SIA - AndySenn Office, CH Timber Construction History



FECENTIA PECENTIA Manurative discass total

Ssse | OvO

GRAMAZIO Kohler R_es_{ea}rch





Past Lectures

Touching Cellulose

[Rethink construction] 13 - 24 September 2021

Open Public Lecture Series & Registered Student Workshop

 $\left(\right)$

Tare 10 Ð \bigcirc 5 B.S. 51 ŝ °Geo 28 N à 0000





Organised by:





Sponsored by:



