Presenting Author Name Paper Title DOI link Session 1 13:30-15:00 Room 201 Moderator: Faggiano, Mrs Beatrice Theme: 3.1 Connections 13 30 Keita Ogawa EFFECT OF RESIN IMPREGNAITON INTO WOOD CELL ON LATERAL RESISTANCE OF SCREWED JOINT CONNECTING SOLID WOOD AND STEEL PLATE ttps://doi.org/10.52202/069179-0151 13.45 Jan Niederwestberg PREDICTION OF WITHDRAWAL STIFFNESS OF SELF-TAPPING SCREWS https://doi.org/10.52202/069179-0153 14 00 RNN-BASED MONOTONIC LOADING BEHAVIOR PREDICTION OF CLT JOINTS https://doi.org/10.52202/069179-0154 Yewei Ding CYCLIC BEHAVIOR OF MORTISE-TENON JOINTS REINFORCED BY SELF-TAPPING SCREW 14 15 Tianxiao Yin https://doi.org/10.52202/069179-0155 14.30 Kiell Arne Malo SERVICEABILITY STIFFNESS FOR TIMBER CONNECTIONS WITH DOWELS AND SLOTTED-IN STEEL PLATES ttps://doi.org/10.52202/069179-0321 14.45 Michael Schweigler MOISTURE AND ASSEMBLY HISTORY EFFECTS ON EMBEDMENT PROPERTIES OF STEEL DOWELS IN SPRUCE AND BIRCH LOADED IN GRAIN DIRECTION https://doi.org/10.52202/069179-0157 Session 2 13:30-15:00 Room 202 Moderator: Tulebekova, Saule Theme: 3.2 Fire engineering 13 30 David Barber ACCOUNTING FOR POST-PEAK COMPARTMENT TEMPERATURE THERMAL DEGRADATION OF MASS TIMBER ttps://doi.org/10.52202/069179-0235 13.45 Eirik Christensen PROTECTION AND THERMAL EXPOSURE OF CLT CEILING AND FLOOR SURFACES https://doi.org/10.52202/069179-0236 14.00 COMPARATIVE PERFORMANCE OF PROTECTIVE COATINGS FOR MASS TIMBER STRUCTURES Miss Lorna Johnson https://doi.org/10.52202/069179-0237 FIRE DESIGN OF GLULAM CONNECTIONS WITH TIMBER-TO-TIMBER BEARING INTERFACES 14 15 Hans-Erik Blomgren https://doi.org/10.52202/069179-0238 14.30 Sam Salem FIRE RESISTANCE TESTING OF CLT-CONCRETE COMPOSITE FLOOR SLABS WITH STRIP NOTCH SHEAR CONNECTIONS https://doi.org/10.52202/069179-0239 14 45 Sam Salem FIRE RESISTANCE TESTING OF CLT-CONCRETE COMPOSITE FLOOR SLABS UTILIZING GLUED-IN STEEL PLATES AS SHEAR CONNECTORS. https://doi.org/10.52202/069179-0240 Session 3 13:30-15:00 Moderator: Cepelka, M.Sc., Martin Theme: 3.5 Structural modelling, analysis & design 13 30 Jan Pełczyński MODELLING OF OSB SANDWICH PANELS WITH ORIGAMI-INSPIRED CORE ttps://doi.org/10.52202/069179-0320 13.45 Boris Azinovic INNOCROSSLAM – ADDING KNOWLEDGE TOWARDS INCREASED USE OF CROSS LAMINATED TIMBER (CLT) https://doi.org/10.52202/069179-0321 Alen Malagic REINFORCED NOTCHED CROSS-LAMINATED TIMBER PLATES: LOAD-BEARING CAPACITY AND METHODOLOGY FOR PREDICTING THE FORCE IN REINFORCEMENT ttps://doi.org/10.52202/069179-0322 14 00 ANALYSIS OF DIFFERENT NUMERICAL MODELLING STRATEGIES OF CLT MULTI-STOREY SHEAR WALLS 14 15 Sig. Giuseppe D'Arenzo https://doi.org/10.52202/069179-0323 14.30 Mahboobeh Fakhrzarei IN-PLANE DEFLECTION OF CROSS-LAMINATED TIMBER DIAPHRAG https://doi.org/10.52202/069179-0324 14.45 Alessandro Mazelli EVALUATION OF THE BEHAVIOUR FACTOR BY INCREMENTAL DYNAMIC ANALYSES FOR THE SEISMIC DESIGN OF LIGHT?FRAME TIMBER BUILDINGS https://doi.org/10.52202/069179-0325 Session 4 13:39-15:00 Room 104 Moderator: O'Ceallaigh, Dr Congn Theme: 1.1 Structural performance of materials 13.30 WOOD AND STEEL VISCOELASTIC DAMPERS: SHORT AND LONG-TERM PERFORMANCE Edward Bolte ttps://doi.org/10.52202/069179-0067 13 45 **Edward Bolte** COMPARISON OF THE STRUCTURAL CAPACITY OF SHEAR WALLS SHEATHED WITH ORIENTED STRAND BOARD AND CELLULOSIC FIBER BOARD SUBJECTED TO CYCLIC LOADING https://doi.org/10.52202/069179-0001 14.00 David Dinehart NUMERICAL AND EXPERIMENTAL EVALUATION OF WOOD NAILER OPEN WEB STEEL JOISTS 14 15 Morten Voss I OW-TEMPERATURE BONDING OF TIMBER STRUCTURES ttps://doi.org/10.52202/069179-0046 14.30 Aamir Khokhar STRUCTURAL PERFORMANCE, AND FAILURE MECHANISM, OF HARDWOOD CROSS LAMINATED TIMBER CONCRETE COMPOSITE UNDER SHEAR LOAD GLUED-LAMINATED TIMBER UNDER EXTREME COLD TEMPERATURES SUBJECTED TO IMPACT LOADING 14.45 Nicole Wight https://doi.org/10.52202/069179-0041 Session 5 13:30-15:00 Rroom 105 Moderator: Godonou, Patrice Theme: 5.1 Best practice examples 13.30 Jens Frohnmüller ADHESIVELY BONDED TIMBER-CONCRETE COMPOSITE CONSTRUCTION METHOD (ATCC) - PILOT APPLICATION IN A SCHOOL BUILDING IN GERMANY ttps://doi.org/10.52202/069179-0542 13.45 Jacopo Zanni APPLICATION OF A WOODEN PREFABRICATED SHELL EXOSKELETON FOR THE INTAGRATED AND SUSTAINABLE RETROFIT OF A RESIDENTIAL BUILDING https://doi.org/10.52202/069179-0543 BUILDING WITH WOOD STRUCTURES - SUCCESDESIGN PROCESS 14 00 Alain Bradette https://doi.org/10.52202/069179-0544 14.15 Eduardo Rojas Briales CAN RISING DEMAND FOR TIMBER IN CONSTRUCTION ACCELERATE DEFORESTATION? nttps://doi.org/10.52202/069179-0545 14.30 Harald Liven MJØSTÅRNET: THE WORLD'S TALLEST TIMBER BUILDING VALIDATING MOISTURE-SAFE ENERGY EFFICIENT CLT ASSEMBLIES IN HOT AND HUMID CLIMATES USING EXPERIMENTAL TESTING 14.45 Marcus Strang ttps://doi.org/10.52202/069179-0577 Session 6 13:30-15:00 Room 106 Moderator: Groba. Ute Theme: 4.1 Architectural potential of new wooden materials & technologies BENDING OF CLT BY THE LATTICE HINGE METHOD 13.30 Laurane Néron https://doi.org/10.52202/069179-0481 STRATOCONCEPTION®, AN ADDITIVE MANUFACTURING PROCESS FOR TIMBER ARCHITECTURE: CHALLENGES AND OPPORTUNITIES https://doi.org/10.52202/069179-0482 13.45 Victor Fréchard 14.00 Matthias Arnold HYPERBOLIC PARABOLOID SHELLS MADE OF DIAGONAL LAMINATED TIMBER ELEMENTS ttps://doi.org/10.52202/069179-0483 Judith Sheine MASS TIMBER PANELIZED WORKFORCE HOUSING IN OREGON, U.S. nttps://doi.org/10.52202/069179-0484 14.15 https://doi.org/10.52202/069179-0485 14.30 Payton Narancic UTILIZING LOW-VALUE WOOD SPECIES FROM FOREST RESTORATION PROJECTS IN LOCAL CLT MANUFACTURE AND DESIGN SPECIAL SIZED TIMBER POLES AS MAIN STRUCTURAL MATERIAL IN TWO SPORTS GYAND A WINERY – BRAZIL https://doi.org/10.52202/069179-0489 14.45 Roberto Lecomte De Mello Session 7 13:30-15:00 Room 107 Moderator: Moutou Pitti, Rostand Theme: 3.8 Mixed, composite & hybrid structures 13.30 Elif Appavuravther Sumichrast BENDING TESTS ON TIMBER CONCRETE COMPOSITES WITH PERFOBOND CONNECTIONS https://doi.org/10.52202/069179-0410 Craig Cowled MECHANICAL BEHAVIOUR OF TIMBER-STEEL COMPOSITE CONNECTION SYSTEMS 13.45 14.00 Feiyang Xu FINITE ELEMENT ANALYSIS OF BUCKLING BEHAVIOR OF TIMBER ENCASED STEEL COMPOSITE COLUMNS SUBJECTED TO AXIAL LOAD https://doi.org/10.52202/069179-0417 Viktória Bajzecerová THE ADHESIVE SHEAR CONNECTION OF TIMBER AND CONCRETE SLABS IN HUMID ENVIRONMENT https://doi.org/10.52202/069179-0419 CYCLIC TESTS ON AN INNOVATIVE FRICTION DISSIPATIVE DEVICE FOR SEISMIC RETROFIT WITH CLT PANELS nttps://doi.org/10.52202/069179-0420 14.30 Francesco Boggian 14.45 Daniel Chapman PREFABRICATED TIMBER CONCRETE COMPOSITES ttps://doi.org/10.52202/069179-0403

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Stephan Theme: 4.2 Integration of parametric architectural design & CNC manufacturing CARPENTER AND ROBOT, HOW TO BENEFIT FROM THE KNOWLEDGE OF CRAFTSMEN AND THE STRENGTH OF ROBOTS https://doi.org/10.52202/069179-0492 15.30 Wolfgang Schwarzmann 15 45 A BIM-BASED MODULE DESIGN METHODOLOGY FOR THE ROOF PLANNING OF MODERNIZED KOREAN TRADITIONAL WOODEN BUILDINGS https://doi.org/10.52202/069179-0493 Gee Heon Kim STEPS TOWARDS A UNIVERSAL SCHEME FOR PARAMETRIC DETAILING OF COMPOUND TIMBER STRUCTURES 16.00 Human John Haddal Mork 16.15 Riccardo Pinotti HYGRO-THERMAL EXPERIMENTAL ANALYSIS OF A FLAT ROOF STRUCTURE INTEGRATING A VARIABLE VAPOR-DIFFUSIVITY MEMBRANE OUTDOOR PANELS FROM NORWAY SPRUCE – THE EFFECT OF COATING COLOUR ON THE TEMPERATURE ttns://doi.org/10.52202/069179-0499 16.30 Sebastian Svensson Meulmann HYGROTHERMAL PERFORMANCE OF NATURE-BASED INSULATION MATERIALS INTEGRATED IN TIMBER-BASED WALL SYSTEMS. 16 45 Dimitrios Kraniotis https://doi.org/10.52202/069179-0499 Session 14 15:30-17:00 Room 107 Moderator: Nesheim, Sveinung Theme: 3.8 Mixed, composite & hybrid structures Matthias Füchslin PUSH-OUT TESTS OF WET-PROCESS ADHESIVE-BONDED BEECH TIMBER-CONCRETE AND TIMBER-POLYMER-CONCRETE COMPOSITE CONNECTIONS 15.30 15 45 Cristiano Loss SEISMIC FRAGILITY OF A NEW MASS TIMBER-STEEL HYBRID BUILDING SYSTEM EQUIPPED WITH CLT FLOOR DIAPHRAGMS ttps://doi.org/10.52202/069179-0423 16.00 Simon Aurand TRUCTURAL BEHAVIOR OF TIMBER-STEEL-JOINTS WITH EITHER DOWEL-TYPE FASTENERS OR CONTINUOUS JOINTS tps://doi.org/10.52202/069179-0424 16.15 Simon Aicher SEMI-INTEGRAL FULL-SCALE STUTTGART TIMBER MODEL BRIDGE tps://doi.org/10.52202/069179-0425 16.30 Ioan W. Gikonvo NUMERICAL MODELLING OF A CROSS-LAMINATED TIMBER-TO-CONCRETE DOWEL-TYPE CONNECTION USING THE BEAM-ON-FOUNDATION MODEL tps://doi.org/10.52202/069179-0404 https://doi.org/10.52202/069179-0426 16 45 Robert Jackson LIMBERLOST PLACE: A 10-STOREY SLAB-BANDED STRUCTURE