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# NMM 2017

Nano & Makro Mechanika

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## Program konference

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21. září 2017 od 8:00  
Fakulta stavební ČVUT v Praze, místnost C221

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Katedra mechaniky Fakulta stavební ČVUT  
Studentské vědecké konference 2017

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## Program konference

08:00 – 08:30	Registrace
08:30 – 10:15	Sekce I
10:15 – 10:45	Coffee Break I
10:45 – 12:30	Sekce II
12:30 – 13:30	Oběd
13:30 – 15:30	Sekce III
15:30 – 16:00	Coffee Break II
16:00 – 17:45	Sekce IV
17:45 – 18:00	Zakončení

**Podrobný program konference**

**08:00 – 08:30 Registrace**

**Předsedající: Ing. Tomáš Plachý, Ph. D.**

**08:30 – 10:15 Sekce I**

**08:30 Kučíková, L.**

Using Homogenization and Nanoindentation for Microfibril Angle Determination of Spruce

**08:45 Hříza, J.**

The Effect of Plasticizer on Mechanical Properties of the Cement Paste with Fine Ground Recycled Concrete

**09:00 Šmídová, E.**

Comparison of Failure Criteria for Wood in Tensile-Shear Stress State

**09:15 Maroušková, A.**

Solid Burnt Bricks' Tensile Strength

**09:30 Otcovská, T.**

Drying Characteristic of Rammed Earth with Illitic-kaolinitic Clay Content

**09:45 Mužíková, B.**

Mass Moisture Development and Value of Rammed Earth Material

**10:00 Schmidt, J.**

Variationally-based Effective Dynamic Thickness for Laminated Glass Beams

**10:15 – 10:45 Coffee Break I (MEGA BUF FAT)**

**10:45 – 12:30 Sekce II**

**Předsedající: Ing. Tomáš Plachý, Ph. D.**

**10:45 Zrůbek, L.**

Wang Tiles Local Tilings Created by Merging Edge-compatible Finite Element Meshes

**11:00 Šedlbauer, D.**

Wang Tile Size in Terms of Circular Particle Dynamics

**11:15 Tyburec, M.**

Optimization-based Approach to Tiling of Finite Areas with Arbitrary Sets of Wang Tiles

**11:30 Valentová, S.**

Evaluation of Effective Properties of Basalt Textile Reinforced Ceramic Matrix Composites

**11:45 Dvořáková, E.**

On Development of the Interactive Design Tool Based on Isogeometric Analysis

**12:00 Mikeš, K.**

Adaptive Quasicontinuum Simulation of Elastic-brittle Disordered Lattices

**12:15 Antoš, J.**

Assessment of 2d-dic Stochastic Patterns

**12:30 – 13:30 Oběd (MEGA BUF FAT)**

**13:30 – 15:30      Sekce III**

**Předsedající: Ing. Tomáš Plachý, Ph. D.**

**13:30      Hrbek, V.**

Micro-mechanical Performance of Concrete Used as Recycled Raw Material in Cementitious Composite

**13:45      Trejbal, J.**

Pullout Behavior of Oxygen Plasma Treated Polymer Fibers from Cement Matrix

**14:00      Dejdar, L.**

Performance of Cement Composites Reinforced with Surface-modified Polypropylene Micro- and Macro-fibers

**14:15      Hlůžek, R.**

Plasma Treatment Impact on Physical and Chemical Properties of Polymeric Fibers

**14:30      Klapálek, P.**

Evaluation of Micromechanical Properties of Carbon Fiber Fabric Using Nanoindentation

**14:45      Prošek, Z.**

Long-time Investigation of Cement Composite Material with Micronized Waste Marble Powder: Mechanical Properties

**15:00      Zobal, O.**

Methodology for Measuring the Shear Stress of Plasterboards

**15:15      Topič, J.**

Hydration Process and Mechanical Properties of Cement Paste with Recycled Concrete Powder and Silica sand Powder

**15:30 – 16:00      Coffee Break II (MEGA BUF FAT)**

**16:00 – 17:45      Sekce IV**

**Předsedající: Ing. Tomáš Plachý, Ph. D.**

**16:00      Verner, M.**

The Occurrence of Synchronized Jumping Crowd at Sports Stadiums

**16:15      Řehounek, L.**

Geometrical Optimization of Dental Implants With Regard to Osseointegration

**16:30      Ďureje, J.**

Foamed Cement Composites: Detection of the Modulus of Elasticity Using DIC Analysis and Comparison with Other Methods

**16:45      Venglár, M.**

Modal Analysis for Revision of a FEM Model of a Steel Truss Beam

**17:00      Doškář, M.**

Synthesized Enrichment Functions for Extended Finite Element Analyses with Fully Resolved Microstructure

**17:15      Havelka, J.**

Non-invasive Inverse Problem in Civil Engineering

**17:30      Šulc, S.**

Coupled Simulation for Fire-exposed Structures Using CFD and Thermo-mechanical Models

**17:45 – 18:00      Zakončení konference**

**Vyhlášení nejlepší prezentace**