Doctoral Seminar Invitation

27th and 28th of May 2021

Dear Supervisors and PhD Students,

I would sincerely invite you to the seminar of the **István Sályi Doctoral School** on 27th and 28th of May.

The seminar will be held online at MS Teams platform. The connection links for the seminar can be found below for both days.

For 27th of May:

https://teams.microsoft.com/l/meetup-join/19%3ae393bea711ca45eebeb18c5aec43eef3%40thread.tacv2/1622015908831?context=%7b%22Tid%22%3a%22c43201f8-7cd8-4144-9080-ec5947253558%22%2c%22Oid%22%3a%2297bd577a-4b56-47f5-9cbf-abf1570d6928%22%7d

For 28th of May:

https://teams.microsoft.com/l/meetup-join/19%3ae393bea711ca45eebeb18c5aec43eef3%40thread.tacv2/1622015983700?context=%7b%22Tid%22%3a%22c43201f8-7cd8-4144-9080-ec5947253558%22%2c%22Oid%22%3a%2297bd577a-4b56-47f5-9cbf-abf1570d6928%22%7d

The first presenter will start at $8^{\underline{00}}$ am. (please connect to the room earlier). Approximate length of presentations **12 minutes** (+3 minutes for the questions and notes).

The language of the seminar is English.

27th of May 2021 (Chair: Prof. Dr. Károly Jármai)

8^{00}-8^{15}

Siddiqui Shiraz Ahmed (supervisor: Dr. Mária Berkes Marosné)

Comparative study on the tribological behaviour of CrN and DLC coatings on X42Cr13 tool steel using reciprocating ball-on-plate test

8^{15}-8^{30}

Róbert Lipták (supervisor: Dr. István Bodnár)

The effect of a solar power plant on the low voltage electrical power grid

8^{30}-8^{45}

Dávid Matusz-Kalász (supervisor: Dr. István Bodnár)

Inspection and diagnostics of solar systems

8^{45}-9^{00}

Sándor Tollár (supervisor: Dr. Betti Bolló; co-supervisor: Dr. László Kollár)

CFD simulations methods for investigation of windturbine baled section

9^{00}-9^{15}

Kristóf Szabó (supervisor: Dr. György Hegedűs)

Exploration of Generative Design Methods and Algorithms for the Design of Components Produced by Additive Manufacturing Technology

9^{15}-9^{30}

István Tüske (supervisor: Dr. György Hegedűs)

Analysis of machine tools units with parallel kinematics

9^{30}-9^{45}

Tamás Bence Venczel (supervisor: Dr. Krisztián Hriczó; co-supervisor: Dr. László Berényi)

Risk evaluation and prediction models of product-and service development

9^{45}-10^{00}

Alwafaie Mohammad Alaa (supervisor: Dr. Béla Kovács)

ERS from Exhaust Automotive

10^{00}-10^{15}

Iskandar Alaa (supervisor: Dr. Béla Kovács)

Deep Reinforcement learning for swarm robotic

10^{15}-10^{30}

Mohammed Alktranee (supervisor: Dr. Péter Bencs)

Thermal behavior of the PV panel

10^{30}-10^{45}

Saleh Mahmoud (supervisor: Dr. Endre Kovács)

New stable, explicit, third order method for solving heat conduction equations

10^{45}-11^{00}

Al-Janabi Humam Kareem Jalghaf (supervisor: Dr. Endre Kovács; co-supervisor: Dr. Betti Bolló)

New effective numerical methods to solve the heat conduction equation

11^{00}-11^{15}

Omle Issa Jasem (supervisor: Dr. Endre Kovács)

New unconditionally positive algorithms to solve stiff differential equations such as the heat conduction equation

11^{15}-11^{30}

Jamal Karmoua (supervisor: Dr. Béla Kovács; co-supervisor: Dr. Ádám Dobossy)

Structured Light Sensing Techniques for Automatic Welding Robot

11^{30}-11^{45}

Zoltán Tarpay (supervisor: Dr. György Kovács)

Fiber-reinforced composite rubber conveyor belt test methods

11^{45}-12^{00}

Bassel Alsalamah (supervisor: Dr. László Kuzsella)

Numerical investigation of temperature distribution is sico test specimens on Gleeble 3500™ physical simulator

12^{00}-12^{15}

Al-Hamzawi Mortda Mohammed Sahib (supervisor: Dr. Szabolcs Szávai)

Prediction of fibre reinforced composite material by using neural network

12^{15}-12^{30}

Viktor Gál (supervisor: Dr. Zsolt Lukács; co-supervisor: Dr. Péter Zoltán Kovács)

A new specimen for investigating shear fracture strain

12^{30}-12^{45}

Dessie Jemal Ebrahim (supervisor: Dr. Zsolt Lukács)

Forming tool design for the expansion of aerosol can

12^{45}-13^{00}

Lucas Alexandre de Carvalho (supervisor: Dr. Zsolt Lukács)

Lubrication and friction in numerical modeling of sheet metal forming

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28th of May 2021 (Chair: Prof. Dr. Gabriella Vadászné Bognár)

8^{00}-8^{15}

Buta Singh (supervisor: Dr. Zoltán Siménfalvi; co-supervisor: Dr. Zoltán Szamosi)

Effect of different mixing speeds on biogas production rate in an anaerobic digester.

8^{15}-8^{30}

Pálma Kapitány (supervisor: Dr. Tamás Szabó)

Electromechanical analysis of an electromagnet

8^{30}-8^{45}

Hasan Nazha (supervisor: Dr. Szabolcs Szávai)

A methodology for computational design of an ankle-foot orthosis

8^{45}-9^{00}

Yassine Chahboub (supervisor: Dr. Szabolcs Szávai)

Prediction of failure of pipeline used in nuclear power plan

9^{00}-9^{15}

Zsombor Lajos Fülöp (supervisor: Dr. Attila Szilágyi)

Dynamic EPP models of flat belts along the pulley

9^{15}-9^{30}

Alzghoul Mohammad Jehad Mohammad (supervisor: Dr. Attila Szilágyi)

Angular Contact Ball Bearing Dynamic Stiffness

9^{30}-9^{45}

Cabezas Sebastian Alejandro (supervisor: Dr. Attila Szilágyi)

Heat transfer modes in rolling bearings at high rotational speeds

9^{45}-10^{00}

Wallyson Thomas Alves da Silva (supervisor: Dr. Attila Szilágyi)

Dynamic analysis of an internal turning tool with elastic Foundation (Winkler model)

10^{00}-10^{15}

Judit Szalai (Dr. Ágnes Judit Takács)

MCDM methods in Industrial Design and Product Development

10^{15}-10^{30}

Antal Nagy (supervisor: Prof. Dr. János Kundrák)

Change in machined surface roughness on milled surface

10^{30}-10^{45}

Judit Kovács (supervisor: Prof. Dr. János Lukács; co-supervisor: Prof. Dr. –Ing. Gerald Wilhelm)

Investigation of the heat affected zone properties based on physical simulation of ultra-high strength steel

10^{45}-11^{00}

Houssam Sabbabi (supervisor: Prof. Dr. János Lukács)

Angular and distortion measurement of welded joiunt of S960QL, S690QL, S500MC

11^{00}-11^{15}

Ahmad Yasser Dakhel (supervisor: Prof. Dr. János Lukács)

Environmentally assisted cracking in Pipelines Industry

11^{15}-11^{30}

Illés Sas (supervisor: Prof. Dr. János Lukács)

Comparison of the effect of preheating temperature on S960QL steel welded joints fracture properties

11^{30}-11^{45}

Meknassi Raid Fekhreddine (supervisor: Prof. Dr. Miklós Tisza)

Comparison study between TBF and Q&P steels in sheet metal forming

11^{45}-12^{00}

Mohamad Klazly (supervisor: Prof. Dr. Gabriella Vadászné Bognár)

Comparison of single phase and two-phase models for the flow of nano-fluid in a duct

12^{00}-12^{15}

Mohsen Khalili Najafabadi (supervisor: Prof. Dr. Gabriella Vadászné Bognár; co-supervisor: Dr. Krisztián Hriczó)

Using Nanofluids in Enhanced Oil Recovery (EOR)