

# **Veszprém Optimization Workshop**

## **Program**

**Faculty of Information Technology  
University of Pannonia  
Veszprém, Hungary**

**August 26 – 27, 2019  
Veszprém, Hungary**

**The conference is dedicated to**

**Professor Béla Vizvári**  
**Eastern Mediterranean University, Turkey**

**on the occasion of his 70<sup>th</sup> birthday**

**Organizing Committee:**

- György Dósa, University of Pannonia, Hungary (chair)
- Ferenc Hartung, University of Pannonia, Hungary
- Tibor Illés, Budapest University of Technology and Economics, Hungary
- Gergely Kovács, Edutus University, Hungary
- Viktória Nagy, University of Pannonia, Hungary

**Conference venue:** Faculty of Information Technology, University of Pannonia, Veszprém

**Acknowledgement:** The conference is partially supported by the Faculty of Information Technology, University of Pannonia, Hungary and the Regional Centre of the Hungarian Academy of Sciences, Veszprém.

### Monday, August 26

9:00-9:50	<i>Registration</i>
9:50-10:00	<i>Opening Session</i>
10:00-10:30	<b>Vizvári</b>
10:30-11:00	<b>G. Kovács</b>
11:00-11:20	<i>Coffee Break</i>
11:20-11:50	<b>Biró</b>
11:50-12:10	<b>Csizmadia</b>
12:10-12:30	<b>Mihálykó</b>
12:30-14:30	<i>Lunch Break</i>
14:30-15:00	<b>Bacsi</b>
15:00-15:30	<b>Szántai</b>
15:30-16:00	<b>Tóth</b>
16:00-16:20	<i>Coffee Break</i>
16:20-16:40	<b>E. Kovács</b>
16:40-17:00	<b>Szalkai</b>
17:00-17:20	<b>Orbán-Mihálykó</b>
17:20-17:40	<b>E.-Nagy</b>
17:40-18:00	<b>Olaj</b>
18:30-20:00	<i>Dinner</i>

### Tuesday, August 27

9:00-9:30	<b>Vizvári</b>
9:30-10:00	<b>Bezdek</b>
10:00-10:30	<b>Tuza</b>
10:30-10:50	<i>Coffee Break</i>
10:50-11:20	<b>Kassay</b>
11:20-11:50	<b>Fábián</b>
11:50-12:20	<b>Illés</b>
12:20-12:50	<b>Darvay</b>
12:50-14:30	<i>Lunch Break</i>
14:30-14:50	<b>Hartung</b>
14:50-15:10	<b>Süle</b>
15:10-15:30	<b>Ábrahám</b>
15:30-15:50	<b>Dósa</b>

## Program

### Monday, August 26

9:00-9:50 **Registration**

9:50-10:00 **Opening**

**Chair: Gy. Dósa**

10:00-10:30 **Béla Vizvári:** The giants who gave their shoulder to me

10:30-11:00 **Gergely Kovács:** Review on Béa Vizvári's activity – on the occasion of his 70th birthday

**Chair: G. Kassay**

11:20-11:50 **Miklós Bíró:** Web technology for the automation of traceability assessment in safety-critical software development

11:50-12:10 **Zsolt Csizmadia:** What makes a solvable nonlinear problem hard

12:10-12:30 **András Mihálykó:** Graph rigidity based augmentation problems

**Chair: T. Illés**

14:30-15:00 **Zsuzsanna Bacsí:** Here, there or everywhere - modelling the evolution of spatial economic patterns

15:00-15:30 **Tamás Szántai:** The benefit of exploiting conditional independences in network reliability calculations

15:30-16:00 **János Tóth:** On joint works

**Chair: Zs Bacsí**

16:20-16:40 **Edit Kovács:** On parameter fitting via Bayesian optimization

16:40-17:00 **István Szalkai:** Matrix-based maintenance management methods and models

17:00-17:20 **Éva Orbán-Mihálykó:** A generalization of Thurstone method for consideration of possible assets

17:20-17:40 **Marianna E.-Nagy:** Linear complementarity problem and matrix classes

17:40-18:00 **Tomas Attila Olaj:** On Square Packing

## Tuesday, August 27

**Chair: Zs. Darvay**

- 9:00-9:30 **Béla Vizvári:** Assignment of patients to hospitals in a case of a large-scale earthquake
- 9:30-10:00 **Károly Bezdek:** On the interplay between discrete geometry, analysis, and combinatorics
- 10:00-10:30 **Zsolt Tuza:** Colorings of hypergraphs

**Chair: T. Szántai**

- 10:50-11:20 **Gábor Kassay:** The Ekeland's Variational Principle in optimization and equilibria
- 11:20-10:50 **Csaba Fábián:** A randomized method for probabilistic problems
- 11:50-12:20 **Tibor Illés:** Strongly polynomial complexity of some pivot algorithms on max flow problems
- 12:20-12:50 **Zsolt Darvay:** New interior-point algorithm for sufficient linear complementarity problem

**Chair: G. Kovács**

- 14:30-14:50 **Ferenc Hartung:** On parameter estimation in functional differential equations
- 14:50-15:10 **Zoltán Süle:** Industry 4.0 solutions for optimizing manufacturing processes
- 15:10-15:30 **Gyula Ábrahám:** Learning the parameters of a reinforcement learning algorithm for process optimization
- 15:30-15:50 **György Dósa:** On online bin packing

## List of participants

- Gyula Ábrahám, University of Pannonia, Hungary
- Zsuzsanna Bacsí, University of Pannonia, Hungary
- Károly Bezdek, University of Calgary, Canada and University of Pannonia, Hungary
- Miklós Biró, Software Competence Center Hagenberg, Austria
- Zsolt Csizmadia, FICO, United Kingdom
- Zsolt Darvai, Babeş-Bolyai University, Cluj-Napoca, Romania
- György Dósa, University of Pannonia, Hungary
- Marianna E.-Nagy, Budapest University of Technology and Economics, Hungary
- Csaba Fábrián, John von Neumann University, Hungary
- Ferenc Hartung, University of Pannonia, Hungary
- Tibor Illés, Budapest University of Technology and Economics, Hungary
- Gábor Kassay, Babeş-Bolyai University, Cluj-Napoca, Romania
- Edit Kovács, Budapest University of Technology and Economics, Hungary
- Gergely Kovács, Edutus University, Hungary
- András Mihálykó, Eötvös Loránd University, Hungary
- Tomas Attila Olaj, University of Pannonia, Hungary
- Éva Orbán-Mihálykó, University of Pannonia, Hungary
- Zoltán Süle, University of Pannonia, Hungary
- István Szalkai, University of Pannonia, Hungary
- Tamás Szántai, Budapest University of Technology and Economics, Hungary
- Szabolcs Takács, Károlyi Gáspár University of the Reformed Church in Hungary
- János Tóth, Budapest University of Technology and Economics and Eötvös Loránd University, Hungary
- Zsolt Tuza, University of Pannonia, Hungary
- Anita Varga, Budapest University of Technology and Economics, Hungary
- Béla Vizvári, Eastern Mediterranean University, Turkey