## Report on AFL 2023:

# 16th International Conference on Automata and Formal Languages Eger, Hungary, September 5–7, 2023

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The conference series AFL was initiated in 1980. In the first years, it took place every second year, later every third year. It was always organized by a university in Hungary. The most recent conferences of the series were organized in Dobogókő (2005), Balatonfüred (2008), Debrecen (2011), Szeged (2014), and again Debrecen (2017).

This year, the conference was organized by the Institute of Informatics of the University of Szeged and the Faculty of Informatics of the Eszterházy Károly Catholic University of Eger and took place in Eger.



#### The invited speakers were

- Galina Jirásková (Slovak Academy of Sciences, Košice, Slovakia) who spoke about 'Operations on Boolean and Alternating Finite Automata',
- Andreas Maletti (University of Leipzig, Germany) who spoke about 'Compositions of Weighted Extended Top-down Tree Transducers', and
- Victor Mitrana (Polytechnic University of Madrid, Spain, and National Institute of R&D for Biological Sciences, Bucharest, Romania) with a talk 'On the Degree of Extension of Some Models Defining Non-Regular Languages'.

Besides the talks by the invited speakers, 18 talks on peer reviewed research papers were presented. They covered many topics in the area of automata and formal languages (fuzzy finite automata, weighted automata, freezing 1-tag systems, 1-limited automata, Horner automata, quantum finite automata, reversible computations, pumping lemmata, tree-controlled grammars, and many more).

On the conference website of the recent edition, you can find a list of all accepted papers:

## https://afl2023.uni-eszterhazy.hu/

The proceedings were edited by Zsolt Gazdag, Szabolcs Iván, and Gergely Kovásznai and published in the EPTCS series (Electronic Proceedings in Theoretical Computer Science, https://eptcs.org/), Volume 386. Extended versions of selected papers will be published in a special issue of the *International Journal of Foundations of Computer Science* (IJFCS).



On top of the Observatory Tower

Besides the scientific sessions, the conference program contained also a social part. It consisted of a visit of the Observatory Tower including an exhibition related to Astronomy and visitors terrasse with a nice view over Eger, a guided tour through the city and into its underworld (caves which were used as wine storage), and a conference dinner in a wine cellary.

Many thanks go to the organizers, program committee members, external reviewers, and participants for the pleasant and successful event. The next edition will probably take place in three years.