



Preface of the Special Issue Dedicated to Selected Papers from DLT 2022

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The 26th International Conference on Developments in Language Theory (DLT 2022) was held in Tampa, Florida, USA in May 2022. It was organized by the Department of Mathematics and Statistics of the University of South Florida. The local organizers were Lina Fajardo Gomez, Margherita Ferrari, Natasha Jonoska, Abdulmelik Mohammed, Masahico Saito, and Dmytro Savchuk.

The DLT conference series provides a forum to present ongoing advances in formal languages and automata. Its scope has always been very general, ranging from fundamental to application-related aspects. The edition of 2022 followed this trend as can be seen from the proceedings of DLT 2022 [1] published with *Lecture Notes in Computer Science*.

This Special Issue contains extended versions of selected contributions presented at DLT 2022. These contributions were nominated by the Program Committee by voting, based on the conference reviews and the impression that the papers have given when being presented at the conference. The issue also includes papers based on the invited talks by Joel Day and Jarkko Kari. Altogether, the Special Issue consists of the following papers in alphabetical order of the first authors.

- “On the Decidability of Infix Inclusion Problem” by Hyunjoon Cheon, Joonghyuk Hahn, and Yo-Sub Han
- “A Closer Look at the Expressive Power of Logics Based on Word Equations” by Joel Day, Vijay Ganesh, Nathan Grewal, Matthew Konefal, and Florin Manea
- “On Forced Periodicity of Perfect Colorings” by Pyry Herva and Jarkko Kari
- “Visit-Bounded Stack Automata” by Jozef Jirásek and Ian McQuillan¹

¹ The conference version of this paper was selected by the Program Committee as the Best Paper of DLT 2022.

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- “Expansivity and Periodicity in Algebraic Subshifts” by Jarkko Kari
- “Characterization of Ordered Semigroups Generating Well Quasi-Orders of Words” by Ondřej Klíma and Jonatan Kolegar
- “The Power Word Problem in Graph Products” by Markus Lohrey, Florian Stober, and Armin Weiß
- “Weighted Tree Automata with Constraints” by Andreas Maletti and Andreea-Teodora Nász
- “Performing Regular Operations with 1-Limited Automata” by Giovanni Pighizzini, Luca Prigioniero, and Šimon Sádovský
- “Rational Index of Languages Defined by Grammars with Bounded Dimension of Parse Trees” by Ekaterina Shemetova, Alexander Okhotin, and Semyon Grigorev

We thank the authors who extended their previously presented abstracts to valuable journal papers; in some cases, the extensions were quite elaborate and include recent results which were obtained after the DLT conference in Tampa.

Each paper submitted to the Special Issue underwent a rigorous review by two anonymous experts. We are very much indebted to the referees for their hard work.

References

1. Diekert, V., Volkov, M.V.: Developments in Language Theory - 26th International Conference, DLT 2022, Tampa, FL, USA, May 9–13, 2022, Proceedings. Lecture Notes in Computer Science, vol. 13257. Springer, Cham (2022)

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