# CURRICULUM VITAE

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| name | Zsuzsanna Lipták |
| email | zsuzsanna.liptak@univr.it |
| URL | profs.scienze.univr.it/~liptak |

## *SCIENTIFIC EMPLOYMENT*

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|---|---|
| since June 2019 | **Associate professor** at University of Verona, Italy. |
| Nov. 2011 – May 2019 | **Assistant professor (Ricercatore),** at University of Verona, Italy. |
| Aug – Oct. 2011 | **PostDoc** at University of Salerno, Italy, with Marie Curie IEF individual fellowship for 24 months (interrupted for taking up position in Verona). |
| July – Aug. 2010 & Aug – Nov 2009 | **Visiting researcher** within the EU-FP6-ToK project HUBI *(Hungarian Bioinformatics)* at A. Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary (6 months). |
| July 2005 – Aug. 2009 | **Research associate** (Wissenschaftliche Mitarbeiterin) at AG Genominformatik, Technische Fakultät, Universität Bielefeld, Germany. |
| | *maternity leave: Sept. 2006 – Sept. 2007* |
| April 2003 – July 2005 | **Research assistant** (Wissenschaftliche Mitarbeiterin) and **PhD student** at AG Genominformatik, Technische Fakultät, Universität Bielefeld, Germany. |
| | *maternity leave: Nov. 2004 – Oct. 2005* |
| May – Aug 2002 & Feb. 2003 | **Visiting researcher** at South African National Bioinformatics Institute (SANBI), University of the Western Cape, Cape Town, and the School of Computer Science, University of the Witwatersrand, Johannesburg, both South Africa (total 4 months). |
| June 1999 – Mar 2003 | **Research assistant** and **PhD student** at the Institute of Theoretical Comp. Science at ETH Zurich (Swiss Federal Institute of Technology), Switzerland. |

## *HIGHER EDUCATION*

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| July 2005 | **PhD degree** (grade 1, with distinction[1]) in Computer Science, Universität Bielefeld, Germany; thesis *Strings in Proteomics and Transcriptomics: Algorithmic and Combinatorial Questions in Mass Spectrometry and EST Clustering.* PhD advisor: Sebastian Böcker. |
| May 1999 | **Diplom** (German Masters degree) in Mathematics (major) and Linguistics (minor) at Freie Universität Berlin, Germany (grade 1); thesis *On Algebraic Characterizations of Regular Term Languages* (in German). Thesis advisor: Dieter Hofbauer / Dirk Siefkes. |

## *INTERNATIONAL GRANTS AND AWARDS*

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| Aug 2011 | **Marie Curie IEF (Intra-European Fellowship for career development) within the 7th Framework Programme of the European Union** for a period of 24 months, at University of Salerno, Italy (total: Euro 244,000). |

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[1] *German grades on scale 1 to 6, where 1 is the top grade and 4 the lowest pass.*

## SCIENTIFIC RESPONSIBILITIES

**a. Program Committee Chair (PC Chair) of international conferences:**

- 31$^{st}$ International Symposium on String Processing and Information Retrieval (SPIRE 2024), Sept. 23-25, 2024, Puerto Vallarta, Mexico (with Edleno Silva de Moura).

- 34$^{th}$ Annual Symposium on Combinatorial Pattern Matching (CPM 2023), June 26-28, 2023, Marne-la-Vallée, France (with Laurent Bulteau).

- 26$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2015), 5-7 Oct. 2015, Verona, Italy (with Bill Smyth).

**b. Member of the Steering Committee (SC) of international conferences:**

- International Symposium on String Processing and Information Retrieval (SPIRE), since 2024

**c. Member of the Program Committee (PC) of international conferences:**

- 17th Latin American Theoretical Informatics Symposium (LATIN 2026), April 13-17, 2026, Florianópolis, Brazil

- 32nd International Symposium on String Processing and Information Retrieval (SPIRE 2025), Sept. 8-11, London, UK

- SIAM Conference on Applied and Computational Discrete Algorithms (ACDA25), July 30-Aug. 1, 2025, Montréal, Quebec, Canada

- 21$^{st}$ Symposium on Computability in Europe (CiE 2025), July 14-18, 2025, Lisbon, Portugal

- 32$^{nd}$ Annual European Symposium on Algorithms (ESA 2024), Track B, Sept. 2-4, 2024, Royal Holloway, UK

- 28$^{th}$ International Conference on Developments in Language Theory (DLT 2024), 12-16 Aug. 2024, Göttingen, Germany

- 30$^{th}$ International Symposium on String Processing and Information Retrieval (SPIRE 2023), Sept. 26-28, 2023, Pisa, Italy

- 24$^{th}$ Italian Conference on Theoretical Computer Science (ICTCS 2023), Sept. 13-15, 2023, Palermo, Italy

- 29$^{th}$ International Symposium on String Processing and Information Retrieval (SPIRE 2022), Nov. 8-10, 2022, Concepción, Chile

- 23$^{rd}$ Italian Conference on Theoretical Computer Science (ICTCS 2022), Sept. 7-9, 2022, Rome, Italy

- 23$^{rd}$ International Symposium on Fundamentals of Computation Theory (FCT 2021), Sept. 12-15, 2021, Athens, Greece

- 28$^{th}$ International Symposium on String Processing and Information Retrieval (SPIRE 2021), Oct. 4-6, 2021, Lille, France

- 32$^{nd}$ International Workshop on Combinatorial Algorithms (IWOCA 2021), July 5-7, 2021, Ottawa, Canada

- 47$^{th}$ International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2021), Jan. 25-18, 2021, Bolzano, Italy

- 27$^{th}$ International Symposium on String Processing and Information Retrieval (SPIRE 2020), 13-15 Oct. 2020, Orlando, FL, USA

- 21$^{st}$ Italian Conf. on Theoretical Computer Science (ICTCS 2020), Sept. 14-16, 2020, Ischia, Italy

- 31$^{st}$ Annual Symposium on Combinatorial Pattern Matching (CPM 2020), June 17-19, 2020, Copenhagen, Denmark

- 46$^{th}$ International Conference on Current Trends in Theory & Practice of Computer Science (SOFSEM 2020), Jan. 20-24, 2020, Limassol, Cyprus

- 26$^{th}$ Int. Symposium on String Processing and Information Retrieval (SPIRE 2019), Oct. 7-9, 2019, Segovia, Spain

- 19$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2019), Sept. 8-10, 2019, Niagara Falls, NY, USA

- 18$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2018), Aug. 20-24, 2018, Helsinki, Finland

- 29$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2018), July 16-19, 2018, Singapore

- 17$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2017), Aug. 21-23, 2017, Boston, MA, USA

- 24$^{th}$ International Symposium on String Processing and Information Retrieval (SPIRE 2017), Sep 26-29, 2017, Palermo, Italy

- 28$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2017), July 17-21, 2017, Newcastle, Australia

- 16$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2016), Aug. 22-24, 2016, Aarhus, Denmark

- 27$^{th}$ Annual Symposium on Combinatorial Pattern Matching (CPM 2016), June 27-29, 2016, Tel Aviv, Israel

- 27$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2016), Aug. 17-19, 2016, Helsinki, Finland

- 22$^{nd}$ International Symposium on String Processing and Information Retrieval (SPIRE 2015), Aug 31-Sep 4, 2015, London, UK

- 14$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2014), Sept. 8-10, 2014, Wrocław, Poland

- 25$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2014), Oct. 15-17, 2014, Duluth, MN, USA

- 13$^{th}$ Workshop on Algorithms in Bioinformatics (WABI 2013), Sept. 2-4, 2013, Sophia Antipolis, France

- 24$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2013), July 10-12, 2013, Rouen, France

**d. Member of the organizing committee (OC) of international conferences, and similar duties:**

- Organizer of **StringMasters 2024**, International Workshop on Open Problems on Strings, June 16 and 20, 2025, Milano, Italy (with Golnaz Badkobeh and Dominik Köppl).

- 31$^{st}$ International Symposium on String Processing and Information Retrieval (SPIRE 2024), Sept. 23-25, 2024, Puerto Vallarta, Mexico: **OC-member**.

- 26$^{th}$ Annual Symposium on Combinatorial Pattern Matching (CPM 2015), 28 June-1 July 2015, Ischia Island, Italy: **OC-member**.

- 26$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2015), Oct. 5-7, 2015, Verona, Italy: **OC-chair.**

- **Organizer** of the **11$^{th}$ edition of StringMasters** (with Giuditta Franco), a series of international workshops on string algorithms, at University of Verona, Feb. 20-23, 2013 (27 participants from 11 countries), see http://stringmasters.di.univr.it

- **Co-chair of Problems Section** for the International Workshop on Combinatorial Algorithms (IWOCA): collection and maintenance of open problems, organisation of Open Problems Session at the conferences, maintenance of webpages (Jan. 2011 - 2015).

**e. Refereeing and reviewing**

- **Referee** for the international journals (in alphabetical order): Algorithmica, Algorithms, Bioinformatics, The Computer Journal, Chemometrics and Intelligent Laboratory Systems, Discrete Applied Mathematics, IEEE/ACM Transactions on Bioinformatics and Computational

Biology, Information Processing Letters, Information Retrieval Journal, Journal of Combinatorial Optimization, Journal of Computer and System Sciences, Journal of Discrete Algorithms, Journal of Experimental Algorithmics, Mathematical Structures in Computer Science, Mathematics of Operations Research, RAIRO ITA (Theoretical Informatics and Applications), Theoretical Computer Science, Theory of Computing Systems.

- **Referee** for the international conferences WG 2000-2002, CIAC 2000, MFCS 2001, WADS 2001, SIROCCO 2002, TCS 2002, FOCS 2002, RECOMB 2004, STACS 2004, WABI 2004, CompLife 2006, RECOMB2006, LATIN 2007, WADS 2009, CPM 2010, BICoB 2011, CPM 2011, SPIRE 2012, ICCABS 2012, SODA 2013, BICoB 2013, WADS 2013, IWOCA 2013, WABI 2013, ESA 2013, ICCABS 2014, SEA 2014, WABI 2014, IWOCA 2014, IWOCA 2015, RECOMB-CG 2015, WADS 2015, SPIRE 2015, IWOCA 2016, CPM 2016, WABI 2016, IWOCA 2017, SPIRE 2017, WABI 2017, RECOMB 2018, IWOCA 2018, WABI 2018, WABI 2019, SPIRE 2019, WORDS 2019, SOFSEM 2020, ICTCS 2020, SPIRE 2020, CPM 2020, MFCS 2020, LATA 2020, SPIRE 2021, FCT 2021, IWOCA 2021, SOFSEM 2021, CPM 2021, DLT 2021, WADS 2021, ICTCS 2022, SPIRE 2022, ICTCS 2023, SPIRE 2023, MFCS 2024, DLT 2024, ESA2024-Track B, SPIRE 2024, DCFS 2025, SIAM-ACDA 2025, CiE 2025, DLT 2025, SPIRE 2025.

- **Reviewer** for: Israel Science Foundation (ISF), 2018; the Italian Ministry for Education, University, and Research (MIUR), 2012; the National Research Foundation (NRF) of South Africa, 2009; tenure review for a US university, 2021.

### d. Committees and other service

*Scientific Committees:*

- Member of the **Final Selection Committee 2025** of the program "Borse di studio - Corsi di laurea magistrale per tutte le discipline" for the Deutscher Akademischer Austauschdienst (**DAAD**), May 2025.

- Member of the **CPM Test-of-Time Award Committee** (Annual Symposium on Combinatorial Pattern Matching), 2024.

- Member of the **Selection Committee for a ricercatore** a tempo determinato (RTd-A, assistant professor) for the University of Bergamo, Italy, Oct. 2023.

- Member of the **EATCS (Italy) Committee for the Selection of the best Italian PhD thesis in Theoretical Computer Science**, 2021.

- Member of the **PhD Thesis Advisory Committee** (3rd supervisor) for Ana Stolnicu, International Graduate School in Molecular Medicine Ulm, Germany (2020-2025).

- **External reviewer** and member of **defense committee** for Thomas Büchler, Ulm University, Germany (defense on 10 Feb. 2024).

- Member of the **PhD committees** of Mauro Zucchelli (2013-2016), Massimiliano Rossi (2016-2019), Andrea Caucchiolo (2020-2022), Davide Cenzato (2019-2022), Sara Giuliani (2019-2022), Francesco Masillo (2020-2025), University of Verona.

- Member of the **PhD committee** of Constantin Bannert, Bielefeld University (defense 03/2009).

*Service at University of Verona:*

- Referente for **Sustainability**, Dept. of Computer Science, University of Verona (July 2024-).

- Member of the **Committee for the Selection of Teaching Assistants** at the Department of Computer Science, University of Verona (since Nov. 2015).

- Member of the **Selection Committee for Erasmus** of the Faculty of Sciences, University of Verona (2014-2022).

- **Referente per l'Internazionalizzazione del Collegio Didattico di Informatica** (2019-2021, informally since 2014).

- Member of the **Commissione Pratiche Studenti del Collegio Didattico di Informatica** (2019-2021).

- Responsible for setting up **Erasmus Exchanges** between University of Verona and Bielefeld University (Germany), Eötvös Loránd University Budapest (Hungary), King's College London (UK), University of Primorska Koper (Slovenia), Univ. of Jena (Germany), Univ. of Dortmund (Germany), Univ. of Helsinki (Finland): **scientific coordinator** 2012-2021 for all of these; at present scientific coordinator for Bielefeld and Jena (Germany).

*Service at ETH Zurich:*

- Member of **Committee for Equal Opportunities** for Women and Men at ETH Zurich, as assistant representative (Febr 2001–Mar 2002). Wrote new chapter "Equal Opportunities for Women and Men" of the "Survival Guide for PhD Students at ETH Zurich".

- **Co-head of Forum for Women in Computer Science at ETH Zurich**, a body that aims at increasing the number of female students at the Department of Computer Science. We won two out of four prizes awarded by the Swiss Ministries of Communication and Culture for efficiently and successfully bridging the IT-gap (Nov. 2001). My responsibilities included organizing one-week intensive courses for female high school students, press work, lobbying, fundraising, introducing mentoring programs and other events, leading a team, presentation at international conferences, etc. (winter 1999–Mar 2003).

*Memberships:*

- Member **INdAM (Gruppo GNCS)**: Istituto Nazionale di Alta Matematica ''Francesco Severi''.

- Member of the **Center for Biomedical Computing** (CBMC), Verona, since 2012.

- Member of the **Centre for Combinatorics on Words & Applications** (CCWA) at Murdoch University, Perth, Australia (since 2014).


## TEACHING

### a. at Verona University

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| from 2022/23 to present | **Course *Modelli Biologici Discreti***, in the Bachelor program *Bioinformatics* (32 out of 56h). |
| from 2021/22 to present | **Course *Computational analysis of genome-scale sequences***, in the Master *Medical Bioinformatics (LM-18)* (42 h). |
| from 2022/23 to present | **Course *Fundamental Algorithms in Bioinformatics*** (72h out of 96h total): module 1: Algorithm Design (6h out of 42h), module 2: Bioinformatics Algorithms/Algorithms in Computational Biology (42h), Master *Medical Bioinformatics (LM-18)* and Master *Molecular and Medical Biotechnology (LM-9)* |
| Jan. 2023, Sept. 2024 | **PhD course *Advanced Data Structures for Textual Data*** (12 h). |
| year 2021/22 | **Course *Fundamental Algorithms in Bioinformatics*** (84h total): module 1: ***Algorithm Design*** (42h), module 2: ***Bioinformatics Algorithms*/**Algorithms in Computational Biology (42h), Master *Medical Bioinformatics (LM-18)* and Master *Molecular and Medical Biotechnology (LM-9)* |
| years 2016/17 to 2020/21 | **Course *Computational analysis of genomic sequences***, in the Master *Medical Bioinformatics (LM-18)* (48 h). |
| year 2020/21 | **Course *Fundamental Algorithms in Bioinformatics*** (72h out of 96h total): module 1: Algorithm Design (24h out of 48h), module 2: Bioinformatics Algorithms/Algorithms in Computational Biology (48h), Master *Medical Bioinformatics (LM-18)* and Master *Molecular and Medical Biotechnology (LM-9)* |
| Sept. 2020 | **PhD course *Advanced Data Structures for Textual Data*** (20 h). |
| years 2016/17 to 2019/20 | **Course *Bioinformatics Algorithms/Algorithms in Computational Biology*** (module 2 of *Fundamental Algorithms for Bioinformatics*), Master |

|  | *Medical Bioinformatics (LM-18)* and Master *Molecular and Medical Biotechnology (LM-9)* (48 h). |
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| March 2016 | **PhD course *Computational methods for handling textual data*** (together with F. Cicalese and G. Franco), at Univ. Verona (8 hrs out of 20 hrs total). |
| years 2015/2016 | **Course *Algorithms in Computational Biology*,** for students of the Master in *Molecular and Medical Biotechnology (LM-9)*, lectures (48h plus student presentations). |
| year 2014/15 | **Course *Modelli Biologici Discreti*,** bachelor *Bioinformatics* (48 h). |
| years 2011/12 to 2014/15 | **Course *Algorithms in Bioinformatics*,** for students of the Master *Bioinformatica e Biotecnologie Mediche (LM-9),* lectures and student oral presentations (48h plus student presentations). |

## b. at Bielefeld University

| fall 2008/09 | **Course *Selected Topics in Algorithmic Bioinformatics*,** for bioinformatics and computer science bachelor/masters and PhD students. |
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| fall 2007/08 | **Course *Advanced Algorithmic Techniques for Bioinformatics*** (together with Ferdinando Cicalese, 50-50%), for bioinformatics and computer science bachelor/masters and PhD students (lectures, exercises). |
| fall 2005/06 | **Course *Algorithms for Mass Spectrometry*,** for bioinformatics and computer science bachelor/master students (lectures, exercise sessions). |
| spring 2004 | **Course *Analysis of Algorithms*** (together with Hans-Michael Kaltenbach, 50-50%), for computer science bachelor/master and PhD students. |
| spring 2003/04 | **Reading seminar *Algorithms for Mass Spectrometry*** *(Genomics and Proteomics)*, for bioinformatics bachelor/masters. |

## c. other teaching

| March 2004 | **Two modules** within the block course *Advanced courses in Bioinformatics*, Universität Greifswald, Germany; for bachelor/masters bioinformatics students: ***Exact and approximate pattern matching*** and ***Introduction to suffix trees****.* (1 day each) |
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| Febr – Mar 2003 | **2 one-week intensive courses *Introduction to Algorithms for Biologists*** and ***Introduction to Programming with Perl*,** for bioinformatics masters students at the South African Bioinformatics Institute (SANBI), Cape Town, South Africa (5 days each). |
| July 2002 | **One-week intensive course *Introduction to Algorithms for Biologists*** for bioinformatics master students at the South African Bioinformatics Institute (SANBI), Cape Town, South Africa (5 days). |
| fall 1999 – Mar 2003 | Organization of and teaching/presentations during one-week **introductory computer science courses** for female high school students, ETH Zurich. |
| 2001 – 2005 | **Teaching Assistant (T.A.)** for courses *Algorithms for MS, Informatics I and II*, Bielefeld and ETH Zürich. |
| 1995 – 1998 | **Student T.A. for 8 courses** in mathematics and theoretical computer science: *calculus, linear algebra, logic, set theory, discrete mathematics, design and analysis of algorithms*, and three one-week intensive courses: *Mathematics for physicists, Linear algebra*, and *Logic and computability*. Freie Universität Berlin. |

## *STUDENTS*

### *PhD students:*

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| ongoing | **Simone Lucà**, since Oct. 2024. |
| 2021-2025 | **Francesco Masillo**, *On Data Structures for Texts and Permutations*. Selected for the **EATCS Award for the Best Italian PhD Thesis in Theoretical Computer Science 2025**. External reviewers: Rajeev Raman (University of Leicester, UK) and Dominik Köppl (University of Yamanashi, Japan). Defended on June 26, 2025. Now **Postdoc at the Technical University Dortmund**, Germany, in Johannes Fischer's group. |
| 2019-2023 | **Davide Cenzato**, *Processing and indexing large biological datasets using the Burrows-Wheeler Transform of string collections*. External reviewers: Enno Ohlebusch (Ulm University, Germany) and Leena Salmela (University of Helsinki, Finland). Defended on 22 Sept. 2023. Now **Postdoc at University Ca' Foscari,** Venice, Italy, in Nicola Prezza's group. |
| 2019-2023 | **Sara Giuliani**, *Sensitivity of the Burrows-Wheeler Transform to Small Modifications, and Other Problems on String Compressors in Bioinformatics*. External reviewers: Johannes Fischer (Dortmund University, Germany) and Hideo Bannai (Tokyo Medical and Dental University, Japan). Defended on 18 Sept. 2023. |
| 2016-2020 | **Massimiliano Rossi**, *Algorithms and Data Structures for Coding, Indexing, and Mining of Sequential Data*. Co-supervision with Ferdinando Cicalese. External reviewers: Marinella Sciortino (Univ of Palermo, Italy), Péter Burcsi (Eötvös Loránd Univ. Budapest, Hungary). Defended on Feb. 27, 2020. From Mar 2020 to Mar 2022, Massimiliano was **Postdoc at the University of Florida**, Gainesville, USA, in Christina Boucher's lab. Since 2022, he has been at **Illumina, San Diego.** |

### *Master students:*

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| ongoing | **Thomas Tosoni**, Master thesis in Medical Bioinformatics. |
| ongoing | **Vincenzo Minolfi**, Master thesis in Computer Science and Engineering. |
| March 2024 | **Martina Lucà**, *Parameters for Prefix-Free Parsing: Analysis and Experimentation.* Master thesis in Molecular and Medical Biotechnology. **Now PhD student** at University of Verona. |
| March 2023 | **Simona Busiol**, *On Powers of BWT Images*. Master thesis in Medical Bioinformatics. |
| July 2022 | **Elena Biagi**, *On comparing the Bijective Burrows-Wheeler-Transform of a word and its reverse.* Master thesis in Medical Bioinformatics. **Now PhD student** at University of Helsinki, supervised by Simon Puglisi. |
| March 2022 | **Sonia Morasso**, *From multisets to phylogenetic trees.* Master thesis in Medical Bioinformatics. |
| July 2021 | **Francesco Masillo**, *On data structures and algorithms for permutations and the Burrows-Wheeler-Transform.* Master thesis in Medical Bioinformatics. **Earned a PhD** at University of Verona. |
| March 2021 | **Anna Toffanello**, *Experiments on the runs-ratio of the Burrows-Wheeler-Transform.* Master thesis in Medical Bioinformatics. |

| March 2020 | **Imane Ait Taleb**, *Promoter Prediction in Corynebacterium Glutamicum*, Master thesis in Molecular and Medical Biotechnology, co-supervised with Jörn Kalinowski, Bielefeld University, Germany. |
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| March 2020 | **Giulia Pegoraro**, *Characterization of Leaderless Transcripts*, Master thesis in Molecular and Medical Biotechnology, co-supervised with Jörn Kalinowski, Bielefeld University, Germany. |
| March 2019 | **Elena Peretti**, *An experimental study of the threshold q-gram distance.* Master thesis in Medical Bioinformatics. |
| March 2019 | **Sara Giuliani**, *When a Dollar Makes a BWT,* Master thesis in Medical Bioinformatics. **Earned a PhD** at University of Verona. |
| March 2018 | **Ana Damatar**, *On Computing the DCJ Distance with Duplication, Insertions and Deletions*, Master thesis in Medical Bioinformatics, co-supervised with Jens Stoye and Daniel Dörr, Bielefeld University, Germany. **Now PhD student** at Ulm University, Germany. |
| March 2017 | **Giovanni Pasquini**, *A study of the error profile of genomic sequences sequenced with Oxford Nanopore technology*, Master thesis in Molecular and Medical Biotechnology. The thesis work was done in collaboration with the lab of Massimo Delledonne, Dept. of Biotechnology, U. Verona. **Earned a PhD at DIGS-BB** (Dresden International Graduate School for Biomedicine and Bioengineering), Germany. |
| March 2015 | Alessio Milanese, *On a new distance measure for genomic repeat discovery*, **Master thesis** in Bioinformatics and Medical Biotechnology. Earned **PhD from EMBL** (European Molecular Biology Lab), Heidelberg, Germany. Now **postdoc at ETH Zurich**, in Shinichi Sunagawa's lab. |

***Bachelor students:***

| ongoing | **Pietro Mosele**, Bachelor thesis in Bioinformatics. |
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| ongoing | **Caterina Ambrosi**, Bachelor thesis in Bioinformatics, co-supervised with Scott Hazelhurst, University of the Witwatersrand, Johannesburg, South Africa. |
| ongoing | **Muhamed Refati**, *Implementing the Nussinov algorithm for RNA-folding*, Bachelor thesis in Bioinformatics. |
| March 2023 | **Andrea Toffaletti**, *NYM protocol: A framework for enhancing anonymity on the web.* Bachelor thesis in Computer Science (Informatica), in co-supervision with ELTE Budapest (István Seres and Péter Burcsi). |
| July 2019 | **Paolo Pulcini**, *Experiments on abelian complexity,* Bachelor thesis in Bioinformatics. Went on to do a master at the University of Trieste, in the program "Data Science and Scientific Computing". Now Data Engineer at **Roche Inc**. |

***Recent master projects (tirocini):***

Alessandro Macchiella (2025), Thomas Tosoni (2024), Alice Saleri (2024), Alessandra Sabato (2024), Martina Lucà (2023), Chiara Dani (2023), Elena Soriato (2023), Vincenzo Minolfi (2023), Elena Biagi (2022), Alberto Azzari (2022), Davide Canevazzi (2021), Lorenzo Mendo (2021), Francesco Masillo (2021), Luca Parmigiani (2020), Margherita De Riu (2020), Anna Toffanello (2020), Francesco Gualdi (2020), Imane Ait Taleb (2019), Davide Cenzato (2019).

## *SELECTED TALKS*

**a. Keynote talks:**

*Title tba,* **keynote talk** at the First Workshop on Combinatorics and the Life Sciences, Lyon, France, Sept. 29-Oct. 2, 2025. (scheduled)

*How to use the Burrows-Wheeler Transform to construct random de Bruijn sequences,* **keynote talk** at the 18th SeqBIM (Annual Meeting of the working group Séquences en Bioinformatique, Informatique et Mathématiques), Rennes, 29/11/2024.

*BWT everywhere,* **keynote talk** at the 35th Annual Symposium on Combinatorial Pattern Matching (CPM 2024), Fukuoka, Japan, 26/6/2024.

*Dollar or no dollar, that is the question (New combinatorial results on the Burrows-Wheeler Transform),* **keynote talk** at the international conference 18th Mons Days on Theoretical Informatics (Journées Montoises), Prague, Czech Republic, 9/9/2022.

**b. Contributed talks at international conferences or workshops or as invited speaker at scientific institutions (since 2010):**

*How to use the BWT to construct random de Bruijn sequences.* Fakultät für Ingenieurswissenschaften, Informatik und Psychologie, Universität Ulm, Germany, 11/2/2025.

*Generating random de Bruijn sequences.* Workshop "Sequences in London (2025)", London, UK, 6/2/2025.

*A BWT-based algorithm for construction of random de Bruijn sequences.* Talk given at the Department of Computer Science (DCC), University of Chile, Santiago, 27/3/2024.

*On the Burrows-Wheeler Transform of string collections.* Primavera dell'Informatica Teorica, **invited talk** in the series of the Italian Chapter of the EATCS (online and recorded), 11/1/2024.

*On the combinatorics of the BWT of string collections.* Workshop "Sequences in London", London, UK, 11/5/2023.

*Dollar or no dollar, that is the question (New combinatorial results on the Burrows-Wheeler Transform),* Pontificia Universidad Católica de Chile (PUC Chile), Santiago, Chile, 4/11/2022.

*On the Parikh-de-Bruijn grid.* Workshop on Words & Complexity, Villeurbane (Lyon), France, 21/3/2018.

*Reconstruction of Trees from Jumbled and Weighted Subtrees.* 27th Annual Symposium on Combinatorial Pattern Matching (CPM 2016), Tel Aviv, Israel, 27/6/2016.

*Reconstruction of Trees from Jumbled and Weighted Subtrees.* AxA Workshop in memoriam Alberto Apostolico (Workshop on Advanced Algorithms on Strings), Venice, Italy, 23/6/2016.

*More on Prefix Normal Words.* London Stringology Days/London Algorithmic Workshop (LSD/LAW 2015), King's College London, UK, 5/2/2015.

*Jumbled Pattern Matching: Online, offline, binary, or not.* McMaster University, Hamilton, ON, Canada, 10/10/2014.

*Normal, Abby Normal, Prefix Normal.* Seventh International Conference on Fun with Algorithms (FUN 2014), Lipari Island, Italy, 1/7/2014.

*Prefix Normal Words, Binary Jumbled Pattern Matching, and Bubble Languages.* London Stringology Days/London Algorithmic Workshop (LSD/LAW 2014), King's College London, UK, 7/2/2014.

*Jumbled String Matching: Motivations, Variants, Algorithms.* Workshop "Combinatorial structures for sequence analysis in bioinformatics", Dip. di Informatica, Sistemistica e Comunicazione, University of Milano-Bicocca, Italy, 27/11/2013.

*Algorithms on strings and other discrete problems in bioinformatics.* Center for BioMedical Computing (CBMC), Verona, Italy, 30/10/2013.

*Recent Advances on Prefix Normal Words.* Dept. of Mathematics and Computer Science of the University of Palermo, Italy, 24/10/2013.

*Some Problems and Algorithms in Non-Standard String Matching.* Workshop "Search Methodologies III", Center for Interdisciplinary Research (ZiF), Bielefeld, Germany, 6/9/2012.

*Non-Standard String Matching: Some Problems and Algorithms.* Université Nice Sophia-Antipolis, Nice, France, 25/4/2012.

*KABOOM! A new suffix-array based algorithm for clustering expression data.* SPIRE 2011 Workshop on the Algorithmic Analysis of Biological Data (WAABD 2011), Pisa, Italy, 21/10/2011.

*On molecules, strings, and coins: Some applications of string combinatorics in computational biology.* Dept. of Computer Science, University of Verona, Italy, 15/3/2011.

*Efficient Reconstruction of RC-Equivalent Strings.* 21st International Workshop on Combinatorial Algorithms (IWOCA 2010), London (UK), 28/7/2010.

*Efficient Reconstruction of RC-Equivalent Strings.* Alfréd Rényi Institute of Mathematics, Budapest, Hungary, 23/7/2010.

*On Table Arrangements, Scrabble Freaks, and Jumbled Pattern Matching.* Fifth International Conference on Fun with Algorithms (FUN 2010), Ischia (Italy), 4/6/2010.


## PUBLICATIONS *(order of authors in publications is alphabetical)*

### a. Volumes edited

**1.** Zsuzsanna Lipták, Ricardo Baeza-Yates (eds.): Topical Collection "String Processing and Information Retrieval" of Theory of Computing Systems, Springer Nature, to appear in 2026.

**2.** Zsuzsanna Lipták, Edleno Silva de Moura, Karina Mariela Figueroa Mora, Ricardo Baeza-Yates (eds.): *Proceedings of the 31$^{st}$ International Symposium on String Processing and Information Retrieval (SPIRE 2024)*, Sept. 23-25, 2024, Puerto Vallarta, Mexico, Lecture Notes in Computer Science (LNCS), Springer (2024).

**3.** Laurent Bulteau, Zsuzsanna Lipták (eds.): *Proc. of the 34th Annual Symposium on Combinatorial Pattern Matching (CPM 2023)*, June 26-28, 2023, Marne-la-Vallée, France. Leibniz International Proceedings in Informatics (LIPIcs) vol. 259, ISBN 978-3-95977-276-1 (2023).

**4.** Zsuzsanna Lipták, William F. Smyth (eds.): *Special issue of Discrete Applied Mathematics on "Combinatorial Algorithms"*, Journal of Discrete Mathematics 246:1-153 (2018).

**5.** Jan Kratochvíl, Zsuzsanna Lipták, and Mirka Miller (eds.): *Special Issue of the European Journal of Combinatorics on "Combinatorial Algorithms"* vol. 68, pages 1-266 (2018).

**6.** Zsuzsanna Lipták, William F. Smyth (eds.): *Proceedings of the 26$^{th}$ International Workshop on Combinatorial Algorithms (IWOCA 2015)*, 5-7 Oct. 2015, Verona, Italy. Lecture Notes in Computer Science (LNCS), vol. 9538, Springer (2016).

**7.** Maxime Crochemore, Jacqueline W. Daykin, Zsuzsanna Lipták (eds.): *StringMasters 2012 & 2013 Special Issue, volume 2.* Journal of Discrete Algorithms 32 (2015).

**8.** Maxime Crochemore, Jacqueline W. Daykin, Zsuzsanna Lipták (eds.): *StringMasters 2012 & 2013 Special Issue, volume 1.* Journal of Discrete Algorithms 28 (2014).


### b. In international peer-reviewed journals

**9.** Davide Cenzato, Giuditta Franco, Zsuzsanna Lipták, Alessio Milanese: *The threshold q-gram distance: a simple, efficient, and effective distance measure for genomic sequence comparison.* To appear in **Natural Computing** (2025).

**10.** Sara Giuliani, Shunsuke Inenaga, Zsuzsanna Lipták, Giuseppe Romana, Marinella Sciortino, Cristian Urbina: *Bit catastrophes for the Burrows-Wheeler Transform*. **Theory of Computing Systems** vol. 69(2): article 19, 37 pages (2025).

**11.** Elena Biagi, Davide Cenzato, Zsuzsanna Lipták, Giuseppe Romana: *On the number of equal-letter runs of the Bijective Burrows-Wheeler Transform.* **Theoretical Computer Science** vol. 1027, article 115004, 28 pages (2025).

**12.** Davide Cenzato and Zsuzsanna Lipták: *A survey of BWT variants for string collections.* **Bioinformatics**, vol. 40 issue 7: btae333, doi: 10.1093/bioinformatics/btae333, 10 p. (2024).

**13.** Christina Boucher, Davide Cenzato, Zsuzsanna Lipták, Massimiliano Rossi, Marinella Sciortino: *r-indexing the eBWT.* **Information and Computation**, vol. 298: article 105155, 23 pages (2024).

**14.** Zsuzsanna Lipták, Francesco Masillo, and Simon J. Puglisi: *Suffix Sorting via Matching Statistics.* **Algorithms for Computational Biology** 19(1): article 11, 18 pages (2024).

**15.** Sara Giuliani*,* Zsuzsanna Lipták*,* Francesco Masillo*,* Romeo Rizzi*: When a Dollar Makes a BWT.* **Theoretical Computer Science** 857:123-146 (2021).

**16.** Ferdinando Cicalese*,* Zsuzsanna Lipták*,* Massimiliano Rossi*: On infinite prefix normal words.* **Theoretical Computer Science** 859:134-148 (2021).

**17.** Zsuzsanna Lipták, Massimiliano Rossi, Simon J. Puglisi: *Pattern Discovery in Colored Strings.* **ACM Journal of Experimental Algorithmics** 26:1-26 (2021).

**18.** Péter Burcsi, Gabriele Fici, Zsuzsanna Lipták, Rajeev Raman, Joe Sawada: *Generating a Gray code for prefix normal words in amortized polylogarithmic time per word.* **Theoretical Computer Science.** 842:86-99 (2020).

**19.** Ferdinando Cicalese, Zsuzsanna Lipták, Massimiliano Rossi: *Bubble-Flip---A new generation algorithm for prefix normal words.* **Theoretical Computer Science** 743:38-52 (2018).

**20.** Péter Burcsi, Gabriele Fici, Zsuzsanna Lipták, Frank Ruskey, Joe Sawada: *On prefix normal words and prefix normal forms.* **Theoretical Computer Science** 659:1-13 (2017).

**21.** Golnaz Badkobeh, Gabriele Fici, Steve Kroon, Zsuzsanna Lipták: *Binary jumbled string matching for highly run-length compressible texts.* **Information Processing Letters** 113:604-608 (2013).

**22.** Alberto Apostolico, Péter L. Erdős, Ervin Győri, Zsuzsanna Lipták, Cinzia Pizzi: *Efficient algorithms for the periodic subgraphs mining problem.* **J. Discrete Algorithms** 17:24-30 (2012).

**23.** Ferdinando Cicalese, Péter L. Erdős, Zsuzsanna Lipták: *A Linear Algorithm for String Reconstruction in the Reverse Complement Equivalence Model.* **J. Discrete Algorithms** 14: 37-54 (2012).

**24.** Péter Burcsi, Ferdinando Cicalese, Gabriele Fici, Zsuzsanna Lipták: *Algorithms for Jumbled Pattern Matching in Strings.* **International Journal of Foundations of Computer Science** 23 (2): 357-374 (2012).

**25.** Péter Burcsi, Ferdinando Cicalese, Gabriele Fici, Zsuzsanna Lipták: *On Approximate Jumbled Pattern Matching in Strings.* **Theory of Computing Systems** 50(1):35-51 (2012).

**26.** Scott Hazelhurst, Zsuzsanna Lipták: *KABOOM! A new suffix-array based algorithm for clustering expression data.* **Bioinformatics** 27(24):3348-3355 (2011).

**27.** Sebastian Böcker, Matthias C. Letzel, Zsuzsanna Lipták, Anton Pervukhin: *SIRIUS: Decomposing isotope patterns for metabolite identification.* **Bioinformatics** 25(2):218-224 (2009).

**28.** Scott Hazelhurst, Winston Hide, Zsuzsanna Lipták, Ramon Nogueira, Richard Starfield: *An overview of the wcd EST clustering tool.* **Bioinformatics** 24(13):1542-1546 (2008).

**29.** Sebastian Böcker, Zsuzsanna Lipták, Marcel Martin, Anton Pervukhin, Henner Sudek: *Decomp – from interpreting Mass Spectrometry peaks to solving the Money Changing Problem.* **Bioinformatics** 24(4):591-593 (2008).

**30.** Sebastian Böcker, Zsuzsanna Lipták: *A fast and simple algorithm for the Money Changing Problem.* **Algorithmica** 48(4):413-432 (2007).

**31.** Nikhil Bansal, Mark Cieliebak, Zsuzsanna Lipták: *Finding Submasses in Weighted Strings with Fast Fourier Transform.* **Discrete Applied Mathematics** 155 (6-7):707-718 (2007).

**32.** Jonas Grossmann, Franz F. Roos, Mark Cieliebak, Zsuzsanna Lipták, Lukas K. Mathis, Matthias Müller, Wilhelm Gruissem, and Sacha Baginsky: *AUDENS: A tool for automated peptide de novo sequencing.* **Journal of Proteome Research** 10:1768-1774 (2005).

**33.** Mark Cieliebak, Thomas Erlebach, Zsuzsanna Lipták, Jens Stoye, Emo Welzl: *Algorithmic Complexity of Protein Identification: Combinatorics of Weighted Strings.* **Discrete Applied Mathematics** 137(1):27-46 (2004).


**c. In international peer-reviewed conference proceedings**

**34.** Diego Diaz, Travis Gagie, Veronica Guerrini, Benjamin Langmead, Zsuzsanna Lipták, Giovanni Manzini, Francesco Masillo and Vikram Shivakumar. *Prefix-free parsing for merging big BWTs.* To appear in: Proc. of the 32nd International Symposium on String Processing and Information Retrieval (**SPIRE 2025**), London, UK, Sept. 8-10, 2025.

**35.** Hideo Bannai, Dominik Köppl, Zsuzsanna Lipták: *A Survey of the Bijective Burrows-Wheeler Transform.* In: The expanding world of compressed data: A **Festschrift for Giovanni Manzini**'s 60th birthday. OASIcs, 29 pages, doi: 10.4230/OASIcs.Manzini.2 (2025).

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**38.** Zsuzsanna Lipták, Martina Lucà, Francesco Masillo, Simon J. Puglisi: *Fast matching statistics for sets of long similar strings.* Proc. of the Prague Stringology Conference (**PSC 2024**), Stringology 2024:3-15 (2024).

**39.** Zsuzsanna Lipták, Francesco Masillo, Gonzalo Navarro: *BAT-LZ Out of Hell*. Proc. of the 35th Annual Symposium on Combinatorial Pattern Matching (**CPM 2024**), Leibniz International Proceedings in Informatics (LIPIcs) vol. 296, 21:1-21:17 (2024).

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**41.** Zsuzsanna Lipták, Francesco Masillo, Gonzalo Navarro, Aaron Williams: *Constant time and space updates for the Sigma-Tau problem.* Proc. of the 30th International Symposium on String Processing and Information Retrieval (**SPIRE 2023**), LNCS vol. 14240:323-330 (2023).

**42.** Elena Biagi, Davide Cenzato, Zsuzsanna Lipták, Giuseppe Romana: *On the number of equal-letter runs of the Bijective Burrows-Wheeler Transform.* Proc. of the 24$^{th}$ Italian Conference on Theoretical Computer Science (**ICTCS 2023**), CEUR vol. 3587:129-142 (2023).

**43.** Sara Giuliani, Shunsuke Inenaga, Zsuzsanna Lipták, Giuseppe Romana, Marinella Sciortino, Cristian Urbina: *Bit catastrophes for the Burrows-Wheeler Transform*. Proc. of the 27th Int. Conf. on Developments in Language Theory (**DLT 2023**), LNCS 13911:86-99 (2023).

**44.** Davide Cenzato, Veronica Guerrini, Zsuzsanna Lipták, Giovanna Rosone: *Computing the optimal BWT of very large string collections*, Proc. of the IEEE Data Compression Conference (**DCC 2023**): 71-80 (2023).

**45.** Sara Giuliani, Zsuzsanna Lipták, Francesco Masillo: *When a Dollar in a Fully Clustered Word Makes a BWT*. Proc. of the 23rd Italian Conference on Theoretical Computer Science (**ICTCS 2022**), CEUR vol. 3284: 122-135 (2022).

**46.** Golnaz Badkobeh, Sara Giuliani, Zsuzsanna Lipták, Simon J. Puglisi: *On Compressing Collections of Substring Samples*. Proc. of the 23rd Italian Conference on Theoretical Computer Science (**ICTCS 2022**), CEUR vol. 3284: 136-147 (2022).

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**48.** Davide Cenzato and Zsuzsanna Lipták: *A theoretical and experimental analysis of BWT variants for string collections*. Proc. of Combinatorial Pattern Matching (**CPM 2022**), Leibniz International Proceedings in Informatics (LIPIcs) vol. 223, 25:1-25:18 (2022).

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**51.** Christina Boucher, Davide Cenzato, Zsuzsanna Lipták, Massimiliano Rossi, Marinella Sciortino: *Computing the original eBWT faster, simpler, and with less memory.* Proc. of the 28th Int. Symposium on String Processing and Information Retrieval (**SPIRE 2021**), LNCS 12944:129-142 (2021).

**52.** Sara Giuliani, Shunsuke Inenaga, Zsuzsanna Lipták, Nicola Prezza, Marinella Sciortino, Anna Toffanello: *Novel Results on the Number of Runs of the Burrows-Wheeler-Transform.* Proc. of the 47th Int. Conference on Current Trends in Theory and Practice of Computer Science (**SOFSEM 2021**), LNCS 12607: 249-262 (2021).

**53.** Zsuzsanna Lipták, Massimiliano Rossi, Simon J. Puglisi: *Pattern Discovery in Colored Strings.* Proc. of the 18th International Symposium on Experimental Algorithms (**SEA 2020**), LIPIcs 160, 12:1-12:14 (2020).

**54.** Sara Giuliani, Zsuzsanna Lipták, Romeo Rizzi: *When a Dollar Makes a BWT*. Proc. of the 20th Italian Conference on Theoretical Computer Science (**ICTCS 2019**), CEUR Workshop Proceedings 2504: 20-33 (2019).

**55.** Ferdinando Cicalese, Zsuzsanna Lipták, Massimiliano Rossi: *On Infinite Prefix Normal Words.* Proc. of the 45th International Conference on Current Trends in Theory and Practice of Computer Science (**SOFSEM 2019**), LNCS 11376:122-135 (2019).

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**57.** Dénes Bartha, Péter Burcsi, Zsuzsanna Lipták: *Tree Reconstruction from Jumbled and Weighted Subtrees.* Proc. of the 27th Annual Symposium on Combinatorial Pattern Matching (**CPM 2016**), Leibniz International Proceedings in Informatics (LIPIcs) 54:10:1-10:13 (2016).

**58.** Golnaz Badkobeh, Gabriele Fici, Zsuzsanna Lipták: *On the Number of Closed Factors in a Word.* Proc. of the 9th International Conference on Language and Automata Theory and Applications (**LATA 2015**), LNCS 8977:381-390 (2015).

**59.** Péter Burcsi, Gabriele Fici, Zsuzsanna Lipták, Frank Ruskey, Joe Sawada: *Normal, Abby Normal, Prefix Normal.* Proc. of the 7th International Conference on Fun with Algorithms (**FUN 2014**) LNCS 8496:74-88 (2014).

**60.** Péter Burcsi, Gabriele Fici, Zsuzsanna Lipták, Frank Ruskey, Joe Sawada: *On Combinatorial Generation of Prefix Normal Words.* Proc. of the 25th Annual Symposium on Combinatorial Pattern Matching (**CPM 2014**), LNCS 8486:60-69 (2014).

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**62.** Carl Barton, Emilios Cambouropoulos, Costas Iliopoulos, Zsuzsanna Lipták: *Melodic String Matching via Interval Consolidation and Fragmentation.* Artificial Intelligence Applications and Innovations (**AIAI 2012**). IFIP Advances in Information and Communication Technology 382, Springer:460-469 (2012).

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**65.** Péter Burcsi, Ferdinando Cicalese, Gabriele Fici, Zsuzsanna Lipták: *On Table Arrangements, Scrabble Freaks, and Jumbled Pattern Matching.* Proc. of the Fifth International Conference on Fun with Algorithms (**FUN 2010**), LNCS 6099:89-101 (2010).

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**69.** Sebastian Böcker, Zsuzsanna Lipták: *Efficient Mass Decomposition.* Proc. of the ACM Symposium on Applied Computing (**ACM SAC 2005**):151-157 (2005).

**70.** Nikhil Bansal, Mark Cieliebak, Zsuzsanna Lipták: *Efficient Algorithms for Finding Submasses in Weighted Strings.* Proc. of the Fifteenth Annual Combinatorial Pattern Matching Symposium (**CPM 2004**), LNCS 3109:194-204 (2004).

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**73.** Zsuzsanna Lipták, Arfst Nickelsen: *Broadcasting in Complete Networks with Dynamic Edge Faults.* Proc. of the 4th International Conference on Principles of Distributed Systems (**OPODIS 2000**), Studia Informatica Universalis:123-142 (2000).

**d. Abstracts, posters, short papers (peer-reviewed)**

- Davide Cenzato, Zsuzsanna Lipták: *On different variants of the Burrows-Wheeler-Transform of string collections.* Data Compression Conference (**DCC 2022**), March 22-25, 2022.

- Davide Cenzato and Zsuzsanna Lipták: *Computing the optimal BWT using SAIS.* Presented at the 17th Workshop on Compression, Text, and Algorithms (**WCTA 2022**), 11/11/2022.

- Zsuzsanna Lipták and Francesco Masillo: *Maintaining the cycle structure of permutations efficiently.* 17th Workshop on Compression, Text, and Algorithms (**WCTA 2022**), 11/11/2022.

- Sara Giuliani, Shunsuke Inenaga, Zsuzsanna Lipták, Nicola Prezza, Marinella Sciortino, Anna Toffanello: *Novel Results on the Number of Runs of the Burrows-Wheeler-Transform.* 15th Workshop on Compression, Text and Algorithms (**WCTA 2020**), Oct. 16, 2020.

- Gabriele Fici, Zsuzsanna Lipták: *Words with the smallest number of closed factors.* 13th Italian Conference on Theoretical Computer Science (**ICTCS 2012**), Sept. 21, 2012.

- Gabriele Fici, Zsuzsanna Lipták: *Words with the smallest number of closed factors.* 14th Mons Days of Theoretical Computer Sc. (Journées Montoises), Louvain, Belgium, Sept. 11, 2012.

- Scott Hazelhurst, Zsuzsanna Lipták: *KABOOM! A new suffix-array based algorithm for clustering expression data.* SPIRE 2011 Workshop on the Algorithmic Analysis of Biological Data (**WAABD 2011**), Pisa, Italy, Oct. 21, 2011.

- Scott Hazelhurst, Zsuzsanna Lipták: *KABM: A novel algorithm for clustering expressed sequence tags.* ISCB Africa **ASBCB** Conference on Bioinformatics 2011, Cape Town, South Africa, March 9-11, 2011.

- Ferdinando Cicalese, Gabriele Fici, Zsuzsanna Lipták: *Searching for jumbled patterns in strings.* Workshop Algorithmique, combinatoire du texte et applications en bio-informatique (**GTSEQ 2010**), Montpellier, France, Jan 25-26, 2010.

- Mark Cieliebak, Thomas Erlebach, Zsuzsanna Lipták, Jens Stoye, Emo Welzl: *A Sublinear Algorithm for Protein Identification.* Second Int. Workshop on Algorithms in Bioinformatics (**WABI 2002**), Rome, Italy, Sept 18-21, 2002.

- Mark Cieliebak, Thomas Erlebach, Zsuzsanna Lipták, Jens Stoye, Emo Welzl: *Algorithmic Complexity of Protein Identification: Combinatorics of Weighted Strings*, Workshop on Combinatorics of Searching, Sorting, and Coding (**COSSAC**), Ischia, Italy, Sept. 7-9, 2001.

### *LANGUAGE SKILLS*

Hungarian, German: *mother tongues*; English: *proficient (Cambridge CPE, grade A);* Italian: *very good;* French: *fair.*

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Verona, Sept. 4, 2025                                                                    Zsuzsanna Lipták