

34th Annual Symposium on Combinatorial Pattern Matching


CPM 2023, June 26–28, 2023, Marne-la-Vallée, France

Edited by


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To all men and women whose passion are algorithms, data structures, and
combinatorics on strings.

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■ Preface

The Annual Symposium on Combinatorial Pattern Matching (CPM) has by now over 30 years of tradition and is considered to be the leading conference for the community working on Stringology. The objective of the annual CPM meetings is to provide an international forum for research in combinatorial pattern matching and related applications such as computational biology, data compression and data mining, coding, information retrieval, natural language processing, and pattern recognition.

This volume contains the papers presented at the 34th Annual Symposium on Combinatorial Pattern Matching (CPM 2023) held on June 26–28, 2023 in Marne-la-Vallée, France. The conference program includes 26 contributed papers and three invited talks, by

- Olgica Milenkovic (University of Illinois Urbana-Champaign, USA),
- Tatiana Starikovskaya (École Normale Supérieure, France), and
- Virginia Vassilevska Williams (Massachusetts Institute of Technology, USA).

For the fifth time, CPM includes the “Highlights of CPM” special session, for presenting the highlights of recent developments in combinatorial pattern matching. In this fifth edition we selected as highlight papers “Separating words and trace reconstruction”, by Zachary Chase, presented at STOC 2021, and “Approximating Dynamic Time Warping Distance Between Run-Length Encoded Strings”, by Zoe Xi and William Kuszmaul, presented at ESA 2022. The conference was preceded by a one-day student summer school taught by Karel Břinda (Inria/IRISA Rennes) and Panagiotis Charalampopoulos (Birkbeck, University of London), and organized at the École Normale Supérieure in Paris by Gabriel Bathie, Paweł Gawrychowski, Garance Gourdel and Tatiana Starikovskaya.

The contributed papers were selected out of 44 submissions, corresponding to an acceptance ratio of 59%. Each submission received at least three reviews. We thank the members of the Program Committee and all the additional external subreviewers, who are listed below, for their hard, invaluable, and collaborative effort that resulted in an excellent scientific program.

The Annual Symposium on Combinatorial Pattern Matching started in 1990, and has since then taken place every year. Previous CPM meetings were held in Paris, London (UK), Tucson, Padova, Asilomar, Helsinki, Laguna Beach, Aarhus, Piscataway, Warwick, Montreal, Jerusalem, Fukuoka, Morelia, Istanbul, Jeju Island, Barcelona, London (Ontario, Canada), Pisa, Lille, New York, Palermo, Helsinki, Bad Herrenalb, Moscow, Ischia, Tel Aviv, Warsaw, Qingdao, Pisa, Copenhagen (on-line), Wrocław and Prague. From 1992 to the 2015 meeting, all proceedings were published in the LNCS (Lecture Notes in Computer Science) series. Since 2016, the CPM proceedings have appeared in the LIPIcs (Leibniz International Proceedings in Informatics) series, as volume 54 (CPM 2016), 78 (CPM 2017), 105 (CPM 2018), 128 (CPM 2019), 161 (CPM 2020), 191 (CPM 2021) and 223 (CPM 2022). The entire submission and review process was carried out using the EasyChair conference system.

We thank the CPM Steering Committee for their support and advice.

Laurent Bulteau and Zsuzsanna Lipták



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