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Daniel Figueiredo · Carlos Martín-Vide
Diogo Pratas · Miguel A. Vega-Rodríguez (Eds.)

Algorithms for Computational Biology

4th International Conference, AlCoB 2017
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Proceedings

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Editors
Daniel Figueiredo
University of Aveiro
Aveiro
Portugal

Carlos Martín-Vide
Rovira i Virgili University
Tarragona
Spain

Diogo Pratas
University of Aveiro
Aveiro
Portugal

Miguel A. Vega-Rodríguez
University of Extremadura
Caceres
Spain

Preface

These proceedings contain the papers that were presented at the 4th International Conference on Algorithms for Computational Biology (AlCoB 2017), held in Aveiro, Portugal, during June 5–6, 2017.

The scope of AlCoB includes topics of either theoretical or applied interest, namely:

– Exact sequence analysis
– Approximate sequence analysis
– Pairwise sequence alignment
– Multiple sequence alignment
– Sequence assembly
– Genome rearrangement
– Regulatory motif finding
– Phylogeny reconstruction
– Phylogeny comparison
– Structure prediction
– Compressive genomics
– Proteomics: molecular pathways, interaction networks
– Transcriptomics: splicing variants, isoform inference and quantification, differential analysis
– Next-generation sequencing: population genomics, metagenomics, metatranscriptomics
– Microbiome analysis
– Systems biology

AlCoB 2017 received 24 submissions. Most papers were reviewed by three Program Committee members. There were also a few external reviewers consulted. After a thorough and vivid discussion phase, the committee decided to accept ten papers (which represents an acceptance rate of about 42%). The conference program included three invited talks and some poster presentations of work in progress.

The excellent facilities provided by the EasyChair conference management system allowed us to deal with the submissions successfully and to handle the preparation of these proceedings in time.

We would like to thank all invited speakers and authors for their contributions, the Program Committee and the external reviewers for their cooperation, and Springer for its very professional publishing work.

March 2017

Daniel Figueiredo
Carlos Martín-Vide
Diogo Pratas
Miguel A. Vega-Rodríguez

Organization

AlCoB 2017 was organized by the Center for Research and Development in Mathematics and Applications, CIDMA, University of Aveiro, Portugal, the Institute of Electronics and Informatics Engineering of Aveiro, IEETA, University of Aveiro, Portugal, and the Research Group on Mathematical Linguistics, GRLMC, Rovira i Virgili University, Tarragona, Spain.

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