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Nota di contenuto	Extending the Reach of Phylogenetic Inference -- Protein (Multi-) Location Prediction: Using Location Inter-Dependencies in a Probabilistic Framework -- Towards Reliable Automatic Protein Structure Alignment -- A Minimum-Labeling Approach for Reconstructing Protein Networks across Multiple Conditions -- Faster mass decomposition -- On NP-Hardness of the Paired de Bruijn Sound Cycle Problem -- Accurate Decoding of Pooled Sequenced Data Using Compressed Sensing -- A Novel Combinatorial Method for Estimating Transcript Expression with RNA-Seq: Bounding the Number of Paths --

A polynomial delay algorithm for the enumeration of bubbles with length constraints in directed graphs and its application to the detection of alternative splicing in RNA-seq data -- Graph-Distance within RNA Secondary Structure Ensembles -- Faster Algorithms for RNA-folding using the Four-Russians method -- Algorithms for the Majority Rule (+) Consensus Tree and the Frequency Difference Consensus Tree -- The generalized Robinson-Foulds metric -- Computing the Skewness of the Phylogenetic Mean Pairwise Distance in Linear Time -- Characterizing Compatibility and Agreement of Unrooted Trees via Cuts in Graphs -- Unifying Parsimonious Tree -- Sibelia: A scalable and comprehensive synteny block generation tool for closely related microbial genomes -- On the matrix median problem -- Fixed-Parameter Algorithm for Minimum Common String Partition with Few Duplications -- MSARC: Multiple Sequence Alignment by Residue Clustering -- Mutual Enrichment in Ranked Lists and the Statistical Assessment of Position Weight Matrix Motifs -- Probabilistic Approaches to Alignment with Tandem Repeats -- Multiscale Identification of Topological Domains in Chromatin -- Modeling Intratumor Gene Copy Number Heterogeneity using Fluorescence in Situ Hybridization data -- Phylogenetic Analysis of Cell Types using Histone Modifications -- Detecting Superbubbles in Assembly Graphs -- A hybrid assembly using high throughput short and long -- Using cascading Bloom filters to improve the memory usage for de Bruijn graphs.

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#### Sommario/riassunto

This book constitutes the refereed proceedings of the 13th International Workshop on Algorithms in Bioinformatics, WABI 2013, held in Sophia Antipolis, France, in September 2013. WABI 2013 is one of seven workshops which, along with the European Symposium on Algorithms (ESA), constitute the ALGO annual meeting and highlights research in algorithmic work for bioinformatics, computational biology and systems biology. The goal is to present recent research results, including significant work-in-progress, and to identify and explore directions of future research. The 27 full papers presented were carefully reviewed and selected from 61 submissions. The papers cover all aspects of algorithms in bioinformatics, computational biology and systems biology.

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