## List of publications

## Siavash Mirarab

## December 15, 2023

- 1. Chao Zhang, Rasmus Nielsen and **Siavash Mirarab**. CASTER: Direct species tree inference from whole-genome alignments. *bioRxiv*, prepress, 2023.
- Shayesteh Arasti, Puoya Tabaghi, Yasamin Tabatabaee and Siavash Mirarab. Optimal Tree Metric Matching Enables Phylogenomic Branch Length Reconciliation. bioRxiv, 2023.11.13.566962 2023.
- 3. Metin Balaban, Yueyu Jiang, Qiyun Zhu, Daniel McDonald, Rob Knight and Siavash Mirarab. Generation of accurate, expandable phylogenomic trees with uDance. *Nature Biotechnology*, Online 2023.
- 4. Daniel McDonald, Yueyu Jiang, Metin Balaban et al. Greengenes2 unifies microbial data in a single reference tree. *Nature Biotechnology*, Online 2023.
- 5. Yasamin Tabatabaee, Chao Zhang, Tandy Warnow and Siavash Mirarab. Phylogenomic branch length estimation using quartets. *Bioinformatics*, 39(Supplement\_1):i185-i193 2023.
- 6. Ali Osman Berk Şapcı, Eleonora Rachtman and **Siavash Mirarab**. CONSULT-II: Taxonomic Identification Using Locality Sensitive Hashing. In *Comparative Genomics*, 196–214, Cham, 2023. Springer Nature Switzerland.
- 7. Shayesteh Arasti and Siavash Mirarab. Optimal Subtree Prune and Regraft for Quartet Score in Sub-Quadratic Time. In 23rd International Workshop on Algorithms in Bioinformatics (WABI 2023), volume 273 of Leibniz International Proceedings in Informatics (LIPIcs), 4:1–4:20, Dagstuhl, Germany, 2023. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. ISSN: 1868-8969.

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- 12. Chao Zhang and Siavash Mirarab. ASTRAL-Pro 2: ultrafast species tree reconstruction from multi-copy gene family trees. *Bioinformatics*, 38(21):4949–4950 2022.
- 13. Metin Balaban, Nishat A. Bristy, Ahnaf Faisal, Md. Shamsuzzoha Bayzid and Siavash Mirarab. Genome-wide alignment-free phylogenetic distance estimation under a no strand-bias model. *Bioinformatics Advances*, 2(1):2021.11.10.468111 2022.
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- 15. Yueyu Jiang, Puoya Tabaghi and **Siavash Mirarab**. Learning Hyperbolic Embedding for Phylogenetic Tree Placement and Updates. *Biology*, 11(9):1256, 2022. ISBN: 2079-7737.
- Navid Bin Hasan, Metin Balaban, Avijit Biswas, Md. Shamsuzzoha Bayzid and Siavash Mirarab. Distance-Based Phylogenetic Placement with Statistical Support. Biology, 11(8):1212 2022. ISBN: 2079-7737.
- 17. Eleonora Rachtman, Shahab Sarmashghi, Vineet Bafna and **Siavash Mirarab**. Quantifying the uncertainty of assembly-free genome-wide distance estimates and phylogenetic relationships using subsampling. *Cell Systems*, 13(10):817–829.e3 2022.
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- 20. Shahab Sarmashghi, Metin Balaban, Eleonora Rachtman, Behrouz Touri, Siavash Mirarab and Vineet Bafna. Estimating repeat spectra and genome length from low-coverage genome skims with RESPECT. PLOS Comp. Bio., 17(11):e1009449 2021.
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- 42. John Yin, Chao Zhang and **Siavash Mirarab**. ASTRAL-MP: scaling ASTRAL to very large datasets using randomization and parallelization. *Bioinformatics*, 35(20):3961–3969 2019.
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