List of publications

Siavash Mirarab

October 5, 2021

- 1. Metin Balaban, Daniel Roush, Qiyun Zhu, and **Siavash Mirarab**. APPLES-2: Faster and More Accurate Distance-based Phylogenetic Placement using Divide and Conquer. *Molecular Ecology Resources*, in press, 2021.
- 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 Computational Biology, in press, 2021.
- 3. Siavash Mirarab, Luay Nakhleh, and Tandy Warnow. Multispecies Coalescent: Theory and Applications in Phylogenetics. *Annual Review of Ecology, Evolution, and Systematics*, 52(1):247–268, 2021.
- 4. Eleonora Rachtman, Vineet Bafna, and **Siavash Mirarab**. CONSULT: accurate contamination removal using locality-sensitive hashing. *NAR Genomics and Bioinformatics*, 3(3):10.1101/2021.03.18.436035, 2021.
- 5. Chao Zhang, Yiming Zhao, Edward Louis Braun, and **Siavash Mirarab**. TAPER: Pinpointing errors in multiple sequence alignments despite varying rates of evolution. *Methods in Ecology and Evolution*, 2041–210X.13696, 2021.
- 6. Niema Moshiri, Davey M Smith, and **Siavash Mirarab**. HIV Care Prioritization using Phylogenetic Branch Length. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 86(5):2019.12.20.885202, dec 2021.
- 7. Maryam Rabiee and **Siavash Mirarab**. SODA: Multi-locus species delimitation using quartet frequencies. *Bioinformatics*, btaa1010, 2021.

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- 15. Eleonora Rachtman, Metin Balaban, Vineet Bafna, and **Siavash Mirarab**. The impact of contaminants on the accuracy of genome skimming and the effectiveness of exclusion read filters. *Molecular Ecology Resources*, 1755–0998.13135, 2020.
- 16. Metin Balaban, Shahab Sarmashghi, and **Siavash Mirarab**. APPLES: Scalable Distance-Based Phylogenetic Placement with or without Alignments. *Systematic Biology*, 69(3):566–578, 2020.
- 17. Maryam Rabiee and **Siavash Mirarab**. INSTRAL: Discordance-Aware Phylogenetic Placement Using Quartet Scores. *Systematic Biology*, 69(2):384–391, 2020.
- 18. Maryam Rabiee and **Siavash Mirarab**. Forcing external constraints on tree inference using ASTRAL. *BMC Genomics*, 21(S2):218, 2020.

- 19. Qiyun Zhu*, Uyen Mai*, Wayne Pfeiffer, Stefan Janssen, Francesco Asnicar, Jon G. Sanders, Pedro Belda-Ferre, Gabriel A. Al-Ghalith, Evguenia Kopylova, Daniel Mc-Donald, Tomasz Kosciolek, John B Yin, Shi Huang, Nimaichand Salam, Jian-yu Jiao, Zijun Wu, Zhenjiang Z. Xu, Kalen Cantrell, Yimeng Yang, Erfan Say-yari, Maryam Rabiee, James T Morton, Sheila Podell, Dan Knights, Wen-jun Li, Curtis Huttenhower, Nicola Segata, Larry Smarr, Siavash Mirarab, and Rob Knight. Phylogenomics of 10,575 genomes reveals evolutionary proximity between domains Bacteria and Archaea. Nature Communications, 10(1):5477, 2019.
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