Annotated bibliography for proposal Tim B.

This document is an annotated bibliography of references that might relate to my proposal. All papers are statistical (no biology or computing). The references fall into the following categories: randomization tests, e-values, multiple p-values, conditional independence tests (non-CRT/CPT), causal inference, and regression with Gaussian response. The references are color-coded: red, yellow, and green indicate high, moderate, and low importance, respectively.

1 Randomization tests

Randomization tests refer to tests that recompute a test statistic under a null hypothesis. The most important examples for our purposes are the permutation test, conditional randomization test, and conditional permutation test.

- 1. Katsevich and Ramdas 2020.
- 2. Berrett, Y. Wang, Barber, and Samworth 2020.
- 3. Li and Candès 2021.
- 4. Zhang and Zhao 2021.
- 5. Javanmard and Mehrabi 2021.
- 6. Zhong, Kuffner, and Lahiri 2021.
- 7. Dobriban 2021.

$\mathbf{2}$ e-values

- 1. Shafer 2021.
- 2. R. Wang and Ramdas 2020.
- 3. Vovk 2020.

4.

3 Multiple testing with *p*-values

4 Conditional independence tests (non-CRT/CPT)

References

- Berrett, Thomas B., Yi Wang, Rina Foygel Barber, and Richard J. Samworth (2020). "The conditional permutation test for independence while controlling for confounders". In: *Journal of the Royal Statistical Society. Series B: Statistical Methodology* 82.1, pp. 175–197 (cit. on p. 1).
- Dobriban, Edgar (2021). "Consistency of invariance-based randomization tests". In: pp. 1–35 (cit. on p. 1).
- Javanmard, Adel and Mohammad Mehrabi (2021). "Pearson Chi-squared Conditional Randomization Test". In: (cit. on p. 1).
- Katsevich, Eugene and Aaditya Ramdas (2020). "On the power of conditional independence testing under model-X". In: pp. 1–42 (cit. on p. 1).
- Li, Shuangning and Emmanuel J. Candès (2021). "Deploying the Conditional Randomization Test in High Multiplicity Problems". In: pp. 1–43 (cit. on p. 1).
- Shafer, Glenn (2021). "Author's reply to the Discussion of 'Testing by betting: A strategy for statistical and scientific communication' by Glenn Shafer". In: *Journal of the Royal Statistical Society. Series A: Statistics in Society* 184.2, pp. 466–478 (cit. on p. 1).
- Vovk, Vladimir (2020). "A note on data splitting with e-values". In: pp. 1–11 (cit. on p. 1). Wang, Ruodu and Aaditya Ramdas (2020). "False discovery rate control with e-values". In: pp. 1–32 (cit. on p. 1).
- Zhang, Yao and Qingyuan Zhao (2021). "Multiple conditional randomization tests". In: (cit. on p. 1).
- Zhong, Yanjie, Todd Kuffner, and Soumendra Lahiri (2021). "Conditional Randomization Rank Test". In: 1, pp. 1–47 (cit. on p. 1).