- We thank all the reviewers for their thoughtful comments and suggestions. We will fix all typos and mechanical errors
- in the camera-ready and future arXiv versions. Reviewer-specific responses follow.
- 3 Reviewer #1 Thank you for pointing us to the interesting work of Esfandiari, Korula and Mirrokni (2018). We will
- 4 certainly reference this work in the final version.
- 5 Regarding our randomized lower bound for ski-rental, our lower bound as stated in Theorem 1.2 holds in the regime of
- 6 $B \to \infty$. Note that this exactly matches the upper bound from Purohit et al. A full, precise statement that is in terms of
- ⁷ B can be found on line 533 (Appendix A).
- 8 As for non-clairvoyant scheduling, we give lower bounds for all numbers of jobs n (Theorem 1.3). Furthermore, any
- 9 lower bound for k jobs translates into the same lower bound for $n \ge k$ jobs. (Note that one can simply "pad" the input
- with jobs that takes 0 time to complete.) Our tight analysis for n=2 shows that the example we find for 2 jobs is in the
- 11 hardest one; however, it is not handled optimally by the algorithm of Purhoit et al. Although our focus in this paper is
- understanding lower bounds, this suggests that there may be more room for future work to improve on the upper bound
- side, and we indeed suggest an algorithm towards this direction.
- 14 Reviewer #2 Thank you for pointing out the distinction between "makespan" and "total completion time". We will
- 15 fix that for the full version.
- 16 Reviewer #3 Thank you for pointing out the simple proof of the deterministic lower bound for ski-rental. We will
- mention this in the full version of this paper.
- For randomized ski-rental, we mention that our approach is LP-based (instead of relying on an ad-hoc construction of
- hard distribution). In general, LP-based arguments (e.g., primal-dual method) are common in obtaining upper bounds
- 20 in competitive analysis. However, they are quite rare in proving (tight) lower bounds. Therefore, we think our proof is
- technically interesting. We do hope that the strategy can be more broadly applied.
- 22 Gollapudi and Panigrahi (2019) considers the setting of having multiple predictions for ski-rental. For the special case
- of one prediction, their result (Theorem 9) subsumes our deterministic lower bound. However, no (tight) tradeoff is
- 24 given when randomization is allowed. We will add the discussion in the full version.