

## Explanation of Revision

Dear PCs, ACs, and reviewers,

We sincerely appreciate the valuable feedback and constructive suggestions from the previous review round. In response, we have revised our paper accordingly, incorporating additional experiments and improving clarity. Below, we outline the key revisions made to address specific concerns.

**1. Improved Positioning of our work:** This is the most significant revision, made in direct response to feedback from the Area Chair (NAN1) and Reviewers Y6wc and 3URn about the need to better position our work within the existing literature. Therefore, we have improved our:

- **Introduction** explaining our decision not to evaluate existing bias-mitigation methods, given their reliance on modifying model internals (often impractical for closed-source judges) and our focus on diagnostic evaluation rather than intervention.
- **Related Work** section in the appendix to better discuss how our paper positions in the context of LLM-as-a-Judge, position bias, its evaluation methodologies, influential factors, and debiasing strategies (e.g., mechanistic approaches and list-wise position bias investigations as pointed out by the reviewers). While acknowledging debiasing methods, we compare our contributions against these prior works and clarify that developing mitigation techniques is out of scope for this study, given the focus on an enhanced framework with newly-proposed metrics and deeper understanding of position bias.

**2. Minor Edits and Typos:** Corrected minor typos, consistent terminology usage, and improved overall sentence flow.

### Final Remarks:

We deeply appreciate the constructive feedback provided by the reviewers and area chair, which has significantly helped improve the clarity, rigor, and comprehensiveness of our work. The revisions we have made aim to address raised concerns while maintaining the integrity of our contributions. We hope that our updated manuscript better reflects the scope and significance of our study. If there are any remaining issues or further suggestions, we are happy to discuss them. Thank you again for your time and valuable insights.