

1 We thank the reviewers for their comments and time. We are glad there is a positive consensus: The proposed method
2 and the analysis are recognized as novel and practically interesting in some important problem settings. Our paper is
3 found well-written.

4 For the sake of completeness, we will address some of the minor remarks by the reviewers below:

5 **R3:** *Advantages against [2].*

6 The arithmetic cost per iteration of [2] is cubic in n (as it requires a full singular value decomposition in general).
7 Also, your comment made us realize that we missed a key qualifier information in Table 1. $1/\varepsilon^2$ iteration complexity
8 of [2] holds only when the objective function is strongly-convex (see Section 4 in [2]). We will clarify this.

9 Based on this clarification we hope that the reviewer will now reconsider our score even more positively.

10 **R3:** *Convexity in matrix completion.*

11 There might be a misunderstanding. We consider the conventional convex matrix completion template with least
12 squares loss with an additional box constraints. See Section 2.3.3. in [DY] for a similar setup (regularized version in
13 the deterministic setting).

14 [DY] D. Davis, W. Yin. "A Three-Operator Splitting Scheme and its Optimization Applications" arXiv:1504.01032v1

15 **R1:** *Adding proof sketch.*

16 As suggested by the reviewer, we can extend the proof sketch the help the readers navigating the proof.

17 **R2:** *Where does (29) follows from?*

18 It follows from Lemma 1 in [4]. We cite it in the previous sentence. We will clarify this in the text.

19 **R2:** *Details on the inequality on Line 532.*

20 There is a typo in line 532, thank you for pointing it. Our bound is missing the δ terms. The correct version of the
21 bound is $(1 - \delta\eta_k)(\beta_{k-1} - \beta_k) - \delta\eta_k\beta_k < 0$. One can verify this bound by mathematical induction technique.

22 **R1,R2,R3:** *Other comments.*

23 We thank all reviewers for their constructive comments on the clarity and presentation. We will consider their
24 suggestions while preparing the camera-ready.