Referee's report on

Coordinate Friendly Structures, Algorithms and Applications

by Peng, Wu, Xu, Yan and Yin

This paper proposes a high-level abstraction for coordinate update method in optimization. The concept of "coordinate friendly operator" is introduced and the proposed framework unifies many previously studied coordinate undate type methods in the literature.

In general, the paper is well written and well organized. But this reviewer still finds some typos and awkward statements. In the following, I will list some of the typos that I found. The authors are suggested to do more thorough and careful checking to make sure that there is no more typos.

1. Page 5, line 4: by $\rightarrow$ but

2. Page 6, the line above the figure: what do you mean by "memory move"? Please be more specific.

3. Page 8, line -9: conic $\rightarrow$ cone

4. Page 10, the line below Eq (7): $\Theta(n) \rightarrow \Theta(p)$

5. Page 11, Example 3: undetermined $\rightarrow$ underdetermined

6. Page 17, the line below Table 2: The sentence "Only when cross ......" reads awkward. Please make it more clearly.

7. Page 18, Eq (12): change comma to period.

8. Page 20, line 8: what is $\tilde{C}$? It is not defined.

9. Page 23, Remark 1: "that are more other than ......" reads awkward.

10. Page 25, line -11: discard $\rightarrow$ discarded.

11. Page 25, line -10: delete "of"

12. Page 27, 7 lines below Eq (35): in the many applications $\rightarrow$ in many applications

13. Page 43, the 2nd line in Section 7: update $\rightarrow$ updates

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