Dear Luis Miguel Lopez-Ramos, Baltasar Beferull-Lozano,

Paper ID: 1924

Title: ONLINE HYPERPARAMETER SEARCH INTERLEAVED WITH PROXIMAL PARAMETER UPDATES

The review process for the 28th European Signal Processing Conference (EUSIPCO 2020) has now been finalized, and it is our pleasure to inform you that your paper has been accepted for publication. Congratulations! The review comments that have led to this decision can be found below.

Due to the recent COVID-19 outbreak, the Organizing Committee has decided to reschedule the conference from August 24-28, 2020 to January 18-22, 2021, when it is expected to be safe to travel. However, the schedule for the publication of the conference proceedings will remain unaltered.

Please carefully consider the following instructions for the publication of your paper and your participation in the conference:

- A camera-ready PDF version of your paper needs to be submitted by July 2, 2020 in the online submission system: <https://cmsworkshops.com/EUSIPCO2020/Papers.asp>. Please make sure to take into account the below review comments when preparing your camera-ready paper. The layout of the camera-ready paper is identical to the layout of the submitted paper. Details can be found in the Author's Information page on the EUSIPCO2020 website. Please do not include page numbers or headers/footers in your camera-ready paper.

- Your paper needs to be covered by a regular (non-student) conference registration by July 2, 2020. This requirement also holds for papers authored or presented by students. One regular registration can cover up to three different papers. Registration will soon open on the conference website: <https://eusipco2020.org>. When registering, you will be asked to enter the Paper ID of the papers you wish to cover with your registration. Papers that are not covered by a regular (non-student) conference registration by July 2, 2020 will be removed from the conference proceedings.

- As a consequence of the COVID-19 pandemic and the rescheduling of the conference to January 2021, we understand that it may not be possible for all authors to travel to Amsterdam for presenting their work. For this reason, we will ask you to confirm your participation as a EUSIPCO 2020 presenter at a later date. You will be contacted in Fall 2020 to provide us with the confirmation of your attendance. Only after we have a received these confirmations, the final conference schedule will be published and you will be informed about the type of presentation (lecture/poster) for your paper.

- The conference proceedings will be published by September 2020 in the open-access proceedings archive of the European Association for Signal Processing (EURASIP) and on IEEE Xplore. Since the publication of the proceedings will take place before the meeting in Amsterdam, the usual no-show policy will exceptionally not be enforced for EUSIPCO 2020.

We look forward to meeting you in Amsterdam in January 2021!

Sincerely,

Alle-Jan van der Veen, Pina Marziliano, Toon van Waterschoot

EUSIPCO 2020 Technical Program Co-Chairs

Ref:

  Paper ID: 1924

  Password: 6207A474

---- Comments from the Reviewers: ----

Paper Format: Correctly formatted

Topic relevance: Very High

Originality of the content: High

Methodology / Research design: High

Evaluation of results and derived conclusions: Average

References to previous work: Average

Correct English usage: High

General Comments to Authors:

- well written

- very general and nicely motivated approach

- a word on computational complexity? especially (14)

- sensitivity to initial guess of lambda?

- it is intuitively unclear why approximating w^{(m)} with lower accuracy yields better convergence. the authors should comment on this.

- Remark on Page 3, col 2: last sentence is unclearly formulated and a little out of context, please elaborate

- numerics: >10^4 ISTA Iterations are still a lot in practice.

- numerics: how does the method compare, when compared to ISTA "knowing" the ideal lambda already?

- the conclusion section should not be confused with a summary.

Paper Format: Correctly formatted

Topic relevance: High

Originality of the content: Average

Methodology / Research design: High

Evaluation of results and derived conclusions: Low

References to previous work: High

Correct English usage: High

General Comments to Authors: The proposed method is interesting and the innovation with respect to previous work is sufficient (but not outstanding), on a problem that has many practical implications. The possible weak point of the paper is in the experimental results. The lack of comparison with other methods may be partly justified by finding the optimal hyperparameter in a lasso scheme. However, there are others possible performance indexes. Also, the choice of a relatively small training+validation set and of a large testing set produce the result in Fig.3, where the optimal parameter for the training set is not so close of the optimal parameter for the testing set. So, the need of exact optimization is not necessarily supported; maybe less precise methods are more robust; maybe a larger training set will give a more adequate optimal value. It is likely that the proposed method behaves well, but the supporting information should be better chosen. Maybe pointers to a supplemental material with more results would help.

-----

Paper Format: Correctly formatted

Topic relevance: High

Originality of the content: Average

Methodology / Research design: High

Evaluation of results and derived conclusions: Average

References to previous work: Average

Correct English usage: High

General Comments to Authors:  The paper is well written and certainly has nice contributions that are worth publishing.

It might be useful to consider same values of \beta in Fig. 1 between the online method and its counterpart. Perhaps a few curves in Fig.2  with extreme values of tolerance to compare with the jittery behavior in Fig. 1 would be helpful rather than many curves. How does this method compare to trainable or learned ISTA?