

ADDENDUM:
EXPLOITING RESIDUAL INFORMATION
IN THE PARAMETER CHOICE
FOR DISCRETE ILL-POSED PROBLEMS*

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In our BIT paper [1] some important information was inadvertently omitted due to an oversight on our part. The purpose of this addendum is to provide this information.

- Our work is inspired by an unpublished report [2] by Bert Rust, who used the normalized cumulative periodogram (NCP) to distinguish signal from noise in an extension of the truncated SVD algorithm. While our algorithm, and our use of the NCP, is different from his, we wish to give credit to Bert Rust for introducing the NCP in connection with regularization algorithms. We also wish to point out that his ideas are further developed in the paper [3].
- In Fig. 5.3 we omitted to re-state that the Komolgorov-Smirnoff limits shown there correspond to a significance level of 5%.
- The results in Fig. 7.3 were obtained for a problem size of $n = 256$.

REFERENCES

1. P. C. Hansen, M. Kilmer and R. H. Kjeldsen, *Exploiting residual information in the parameter choice for discrete ill-posed problems*, BIT, 46 (2006), pp. 41–59.
2. B. W. Rust, *Truncating the Singular Value Decomposition for Ill-Posed Problems*, Report NISTIR 6131, Mathematical and Computational Sciences Division, NIST, 1998.
3. B. W. Rust, *Parameter selection for constrained solutions to ill-posed problems*, in E. Wegman and Y. Martinez (Eds.), *Computing Science and Statistics*, vol 32, pp. 333–347, Interface Foundation of North America, Inc., Fairfax Station, VA.

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