

1 **TITLE**

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3 **Abstract.** Abstract

4 **Key words.** key words

5 **AMS subject classifications.** AMS ref numbers

6 **1. Introduction.**

7 **1.1. Contributions.**

8 **1.2. Previous studies / State-of-the-art.**

9 **1.3. Organization of the paper.**

10 **1.4. Notation.**

11 **2. .**

3. .

12 (3.1)
$$\min_{\beta, \tau} \frac{1}{2} \sum_{n=1}^N (F_n(\beta)\tau - \tilde{w}_n)^2 + \frac{1}{2} \lambda_\alpha \|\tau\|_2^2 + \lambda_\beta \mathcal{R}(\beta)$$

13 Equation (3.1) has the typical form of a variable projection problem [1].

14 **4. .**

15 **5. Conclusion.** Conclusion

16 **Appendix A. Proof of blablabla.**

17 REFERENCES

- 18 [1] D. P. O'LEARY AND B. W. RUST, *Variable projection for nonlinear least squares problems*,
19 Comput. Optim. Appl., 54 (2012), pp. 579–593, <https://doi.org/10.1007/s10589-012-9492-9>.