

New methods for solving minimization problems with coupled constraints

Milojica Jaćimović¹ and Nevena Mijajlović¹

¹Department of Mathematics, Faculty of Mathematics and Natural Sciences, University of Montenegro, milojica@jacimovic.me, nevenamijajlovic@hotmail.com

In our talk we will consider minimization problems with coupled constraints. We will present gradient-type methods (gradient projection, proximal, extragradient method), Newton-type methods and consensus-based algorithm for solving these problems.

References

- [1] A. Antipin, M. Jaćimović and N. Mijajlović, Extragradient method for solving quasivariational inequalities, *Optimization*, **67**(1) (2018), 103–112.
- [2] F. Facchinei, C. Kanzow, S. Karland and S. Sagratella, The semismooth newton method for the solution of quasi-variational inequalities, *Comput. Optim. Appl.* **62**(1) (2015), 85–109.
- [3] N. Mijajlovic, M. Jaćimović, Some Continuous Methods for Solving Quasi-Variational Inequalities, *Comput. Math. Math. Phys.* **58**(2) (2018), 190–195.
- [4] N. Mijajlovic and M. Jaćimović, Proximal methods for solving quasi-variational inequalities, *Comput. Math. Math. Phys.* **55**(12) (2015), 1981–1985.
- [5] A. Nedic and A. Ozdaglar, Distributed subgradient methods for multi-agent optimization, *IEEE Trans. Automat. Control* **54**(1) (2009), 48–61.