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**PROJECTED SOLUTIONS OF QUASI-EQUILIBRIUM PROBLEMS AND
GENERALIZED NASH EQUILIBRIUM PROBLEM: CONCEPT,
RESULTS AND ITERATIVE METHODS**

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A quasi-equilibrium problem is an equilibrium problem in which the constraint set depends on the considered point, and is thus a constraint map. A similar definition can be given for generalized Nash equilibrium problem. A classical assumption is that this constraints set-valued map is a self-map, that is the image set is included into the set on which the constraint map is defined. But when this constraint map is not a self-map, either because the image set is not included into the initial set or even they are not defined in the same space, then the concept of solution for such problems collapses since it intrinsically assumes the existence of fixed points for the constraint map. On the other hand, as shown in [1] for the case of bidding processes in electricity markets, considering such situations is very important in applications.

This is why the concept of *projected solutions* has been defined in [1]. We will here recall this concept, explore some recent generalizations and present two numerical schemes developed in [2] to compute such projected solutions.

REFERENCES

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- [2] D. Aussel, Jauny, A. Sultana, S. Valecha, *Iterative Methods for the Projected Solutions of Quasi-equilibrium Problems*, Preprint, (2025), 30 pp.

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