L^∞-error Estimate of Schwarz Method for Generalized Elliptic Quasi-variatinal Inequalities

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The Schawarz alternating method has been used to solve the stationary or evolutionary boundary valued problems, on domain which consists of two or more overlapping sub-domains.

The solution is approximated by an infinite sequence of function which result solving a sequence of stationary or evolutionary boundary valued problems, in each of sub-domain.

In this paper, we prove a maximum norm analysis of an overlapping Schwarz method on nonmatching girds for the elliptic quasi-variational inequality, where the obstacle and the second member depends of the solution.

Our goal is to generalize and improve some previous results, using the geometrical convergence of solutions and the uniform convergence of subsolutions.

References

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