Global convergence of the Douglas–Rachford method for some nonconvex feasibility problems

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Abstract

In recent times the Douglas–Rachford algorithm has been empirically observed to solve a variety of nonconvex feasibility problems including those of a combinatorial nature. For many of these problems current theory is not sufficient to explain this observed success and is mainly concerned with questions of local convergence. In this talk we show global behavior of the method for some nonconvex feasibility problems.

This is a joint work with Jonathan M. Borwein and Matthew K. Tam.

References

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