The Cyclic Douglas-Rachford Algorithm with r-sets-Douglas-Rachford Operators

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Abstract

The Douglas-Rachford (DR) algorithm is an iterative procedure that uses sequential reflections onto convex sets and which has become popular for convex feasibility problems. In this talk we present a structural generalization that allows to use r-sets-DR operators in a cyclic fashion and also demonstrates great computational advantages over existing results.

This is a joint work with Francisco J. Aragón Artacho (Alicante, Spain) Yair Censor (Haifa, Israel)