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Short title: Stability radii for implicit difference equations.

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Review text:

The paper develops an idea of specification of stability for a perturbed linear difference Cauchy problem which is singular but which is still tractable (i.e., regularized) via suitable projection operators. Such a Cauchy problem is called “implicit” and it may be perceived as equivalent to a combination of an ordinary difference system and an algebraic relation. What is addressed in the paper is the characterization of stability of the solutions under a specific (so called causal) class of perturbations. Their strength is measured by the so called stability radius, real or complex. The formula for its computation is the main result of the paper. Recommended introductory reading: ten years old reference [7] (where the system under consideration has been differential and explicit, non-singular).