A PROJECTION STRATEGY FOR CHOOSING THE REGULARIZATION PARAMETER OF ITERATED TIKHONOV METHOD IN BANACH SPACES.

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Resumo. *We propose a strategy for choosing the sequence of regularization parameters of a variant in Banach spaces of the nonstationary Iterated Tikhonov (nIT) method. In this version, the penalization term of nIT is defined via the Bregman distance induced by a convex functional. The algorithm can be interpreted as a sequence of projections in some specific closed convex subsets. Under standard assumptions we prove strong convergence to a solution of the inverse problem in the noiseless case and the regularization property in case of noisy data.*

This is a joint work with M. Pentón and A. Leitão.